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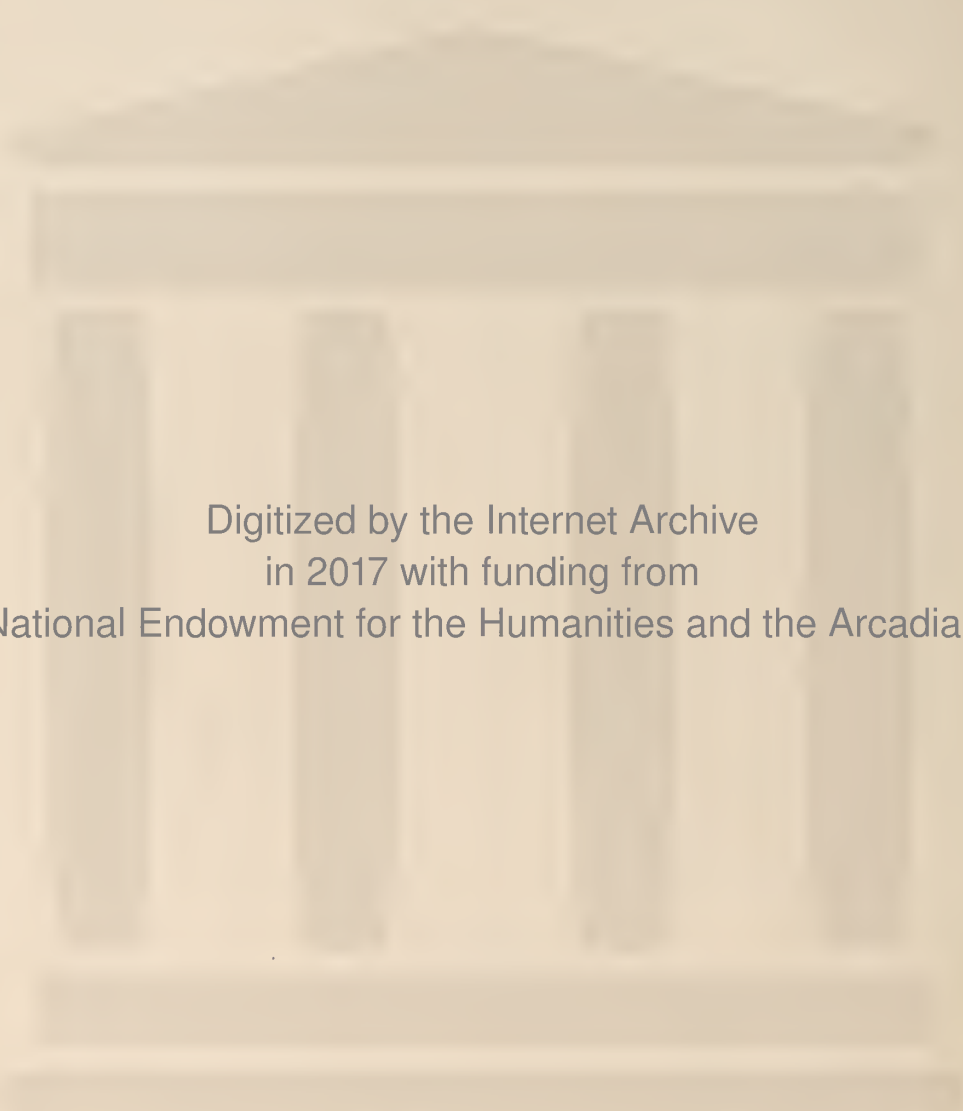
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# THE RHODE ISLAND MEDICAL JOURNAL



THE RHODE ISLAND  
OF MEDICINE

JAN 3 1927

Owned and Published by the Rhode Island Medical Society, Issued Monthly

VOLUME X  
No. 1.

Whole No. 208

PROVIDENCE, R. I., JANUARY, 1927

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Recognizing his many scientific and literary attainments it is the gratifying privilege of the  
Rhode Island Medical Journal to pay tribute to

DR. WILLIAM WILLIAMS KEEN

of Philadelphia for his outstanding achievements in his chosen field

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## ORIGINAL ARTICLES

### WILLIAM WILLIAMS KEEN— A BIOGRAPHICAL SKETCH\*

By

WILFRED PICKLES, M.D.

A descendant of Joran Kyn, one of the original settlers of Chester, Pennsylvania, William Williams Keen was born in Philadelphia on January 19, 1837, and the premedical part of his career, as far as records are available, is largely the story of his college days in Brown University. He obtained his preliminary education at the Central High School and Saunder's Academy in his native city, and entered Brown at the age of eighteen. At this time Francis Wayland was in the last year of his presidency at Brown, the faculty consisting of but ten members, and the total student enrollment being less than two hundred. John Hay and Richard Olney were undergraduates at the same time with young Keen who, four years later, graduated as valedictorian of his class. The subject of his oration was "The Scholar's Sentiment of Veneration for the Past," which, according to the newspaper report of the event, was "characterized by much grace and elegance." In his charge to his classmates he said: "Let us not be drones in the busy world; but at the Bar, in the Pulpit, in ministries to the sick and suffering, in the marts of busy trade, let us by our deeds deserve the veneration of posterity!" There is a strangely familiar sound to this Commencement-Day platitude, but subsequent events have proved that in this instance it had a sincere ring as pronounced by the alert young graduate, and now posterity is very glad to render veneration to at least one member of the class of 1859, who has so successfully made his high resolves come true.

In the archives of Brown University there is preserved a generous scrapbook of contemporary memorabilia assembled during his college years by

this earnest young student. It contains, among other things, newspaper clippings of college events, programs, menus, and even term bills. From these latter documents we learn that his tuition for the first half of his freshman year was \$18.00 and his room rent \$4.50, with thirteen cents for breakage of window glass. In the latter half of the same year the breakage charge was sixty cents, and in the sophomore year seventy-nine cents, which, as Dr. Walter has said, shows progress. The inclusion of numerous "mock programs" and elaborate menus of fraternity suppers, along with Latin orations, poetry by John Hay, and reports of missionary meetings, indicate that the interests of the youthful scholar, like those of the man in after years, were not only intellectual and religious, but also exceedingly human. Following his graduation, Keen remained for a fifth year at Brown in preparation for his medical studies, and left in 1860 to enter the Jefferson Medical College in Philadelphia.

Nothing, perhaps, is more indicative of the tremendous advance which medicine has made in the past sixty-five years than a consideration of the means of medical education in 1860. The description of any medical school in this country at that period is largely negative in nature, for we are much more forcibly struck by the absence of what we consider essentials than by the facilities offered. At the Jefferson Medical College, for example, which Keen entered in September, 1860, there were no laboratories, no library, no real hospital, no ward classes, no microscopes and no instruments of precision. The entire faculty consisted of seven professors and one demonstrator. There was no graded course of instruction, but each professor started his course of lectures on the first day of the school year, apparently wholly unconcerned by the fact that much of his material must be entirely unintelligible until fundamental knowledge was gained in another professor's lectures. Fortunately for the students, the same lectures were repeated almost verbatim from year to year, and as the course leading to a degree consisted of attending two such series of

\*Read before the W. W. Keen Club, April, 1926.

lectures, much could be gained by a second hearing. The school year was short, beginning in October and ending on the last day of February, but even so, many students came late and left early. Requirements for entrance must have been very lax, for we find that "a very small minority had a good preliminary education; still fewer the advantages of a college education; many of them came directly from the plow and the anvil."

There was one surgical and one medical clinic each week. The surgical clinics were conducted by Joseph Pancoast and Samuel D. Gross, men who by their accomplishments did much to make up for the paucity of equipment. Pancoast was the foremost American surgeon of his time, a brilliant and daring operator, with technical skill heightened by the pre-anesthetic necessity for speed. During Keen's school years he served as professor of anatomy, and has been described as having the anatomy of the body at his scalpel's end. Gross was easily the most learned surgeon of his time, having written the first exhaustive treatise on pathological anatomy in English in 1839, and a two-volume system of surgery which was a standard text-book for many years. Antisepsis and asepsis were unknown, and bacteriology, as Keen says with his usual felicity, "was utterly unsuspected." The surgeons operated in dirty coats which had outlived their social usefulness, and used the same table which served for post-mortem demonstrations. Actual sponges were employed, and if one chanced to fall on the floor, it was rinsed in clear water and returned to use at once. It was not uncommon for the surgeon to sharpen his knife on the sole of his boot as the first step of the operation. There were no hemostatic forceps, a tenaculum being passed beneath or through the vessel and an unsterile silk ligature being thus placed and tied. As there were no absorbable sutures, the ends were left long and allowed to hang from the wound, traction being employed from time to time in the succeeding days to determine when the tissues had "rotted away" sufficiently for the suture to be removed. Not uncommonly such removal was followed by severe secondary hemorrhage. Major cases, such as amputation of the breast or of a limb, or removal of stone from the bladder, were talked of for days in advance, and even operations for fistula and hemorrhoids were considered great attractions.

The medical clinics were of little value, as no opportunity was given to the students for personal contact with the patients. As Keen describes it, "the members of the faculty, some of whom had never practised, took turns at clinical teaching, and I always remember with amusement one of them, who, if the patient had diarrhea would give him opium, if he was constipated would give him salts, but if, alas, his bowels were perfectly regular knew not what under the sun to do."

From this brief description it is apparent that whatever practical training the student obtained must be gained outside of the formal school course, and this gave rise to extra-mural schools, of which we shall speak later, and the system of instruction under private preceptors. In addition to his work at the Jefferson Medical College therefore, Keen was fortunate in being the private office student of Jacob M. DaCosta and of John H. Brinton. DaCosta was without question the ablest clinical teacher of his time, being among the first to describe the irritable heart in soldiers and playing an important part in differentiating typhus and typhoid fevers. Had it not been for this association with DaCosta, Keen would have had no opportunity to percuss or auscultate a chest or even to look through a microscope during his entire medical course. Brinton gave Keen his practical training in surgery and, accordingly, it was entirely natural, in response to a request that he furnish a surgeon for the Fifth Massachusetts Regiment in July of 1861, that he recommended Dr. Keen for this position. To Keen's objections that his training was insufficient for this important position Brinton said, "It is true that you know very little, but, on the other hand, you know a good deal more than Smith," the retiring occupant. Accordingly, he was sworn into service as Assistant Surgeon in Washington on July 4, 1861, and was sent to camp in Alexandria.

A little over two weeks later, Dr. Keen had his first experience with actual warfare in the Battle of Bull Run. The wholly unorganized condition of the medical department may be appreciated by the fact that during the entire engagement he received not a single order from anyone. Falling in with a group of medical men, however, he assisted in caring for the wounded, and tells an interesting story, indicative of the ignorance of the surgeons at this time. "One of the wounded required an



amputation at the shoulder joint, and the operator asked the brigade surgeon to compress the subclavian artery. This he proceeded to do by vigorous pressure applied below the clavicle. With a good deal of hesitation, I at last timidly suggested to him that possibly compression above the clavicle would be more efficacious, when, with withering scorn, he informed me that he was pressing in the right place as was proved by the name of the artery, which was subclavian. \* \* \* I had my rather grim revenge, happily not to the serious disadvantage of the patient. When the operator made the internal flap, the axillary artery gave one enormous jet of blood, for the subclavian persisted in running where it could be compressed above the clavicle, in spite of its name. I caught the artery in the flap, as I had been taught to do by Dr. Brinton, and instantly controlled the hemorrhage." Soon after this battle, the period of enlistment of his regiment expired, and Keen was discharged along with its members.

Returning to his medical studies in September of this year, he completed the prescribed course and received the degree of M.D. in March, 1862. Two months later, following an examination, he was given a commission as Acting Assistant Surgeon in the United States Army and was put in charge of the Eckington General Hospital on the outskirts of Washington. Within a few days of receiving this assignment, he was ordered to transform two churches into hospitals within five days. With no previous experience, and with no advice or help from any other officer, he completed the task in three days and on the fourth day had a hundred wounded under care in each hospital. Shortly before the second Battle of Bull Run, Keen was sent from Washington to Pope's army with a supply train, but the Confederate forces relieved him of almost all of his supplies soon after he reached Centreville. He was then entirely unattached, and again received no orders, but finding a hundred wounded men housed in the church, he began to care for them. Bed sores, infections, and secondary hemorrhage, coupled with the lack of any of the simplest facilities for the care of patients, made this task most difficult. Just as food supplies were about to run out, however, an ambulance train arrived and carried Keen and his patients back to Washington.

For several months following this engagement,

Keen was assigned to duty at Hospital No. 1 at Frederick, Md. At this time, his former preceptor Brinton began the collection of material for the Surgeon General's Museum, now grown to be the finest military museum in the world. As his representative, Keen was active in collecting specimens, one of the most curious of which was a bullet found post-mortem suspended in the momentum as in a net. During the next winter he was transferred to the Satterlee Hospital in West Philadelphia, where, in one night soon after the battle of Gettysburg, he cared for five cases of secondary hemorrhage. In 1863 he was again transferred to the Christian Street Hospital, where he became associated with Dr. S. Weir Mitchell and Dr. George R. Morehouse. Mitchell was the leading American neurologist at this time, and this hospital was one of several special hospitals established by the Surgeon General, its function being the care and study of nervous diseases. As a result of their work in this clinic, Mitchell, Morehouse and Keen published a monograph entitled "Gunshot Wounds and Other Injuries of Nerves," which is considered one of the most important surgical contributions of the Civil War, and which served as the basis for Mitchell's later publication, "Injuries to Nerves and Their Consequences." Another important piece of work by these authors was that on "Malingering," in which are described numerous original methods of detecting this most baffling malady.

If medical schools in this country were loosely organized and their requirements very lax, as we have seen, the idea that postgraduate training was of value was firmly rooted. As a result, we find Keen spending the next two years in rounding out his surgical education by study in Europe. He first became the pupil of the younger Pouchet, whose father was one of Pasteur's most ardent opponents in the controversy over spontaneous generation. Following this, he studied in Virchow's laboratory in the Pathological Institute in Berlin. Rudolph Virchow, the founder of cellular pathology, was at this time in his prime as an anatomist, pathologist, sanitarian, anthropologist, editor, teacher and politician. From him Keen received that basic training in pathology which is absolutely essential to rational surgery; and we can imagine him seated at the long table, taking his turn in observing some specimen through the

microscope which traveled from one student to another on a miniature railroad track. On his return to Paris, Keen visited Etienne-Jules Marey, the eminent French physiologist who had recently devised a practical clinical sphygmograph. Upon testing Keen's pulse, Marey informed him that it was very weak, "but time has shown that what it has lacked in vigor it has made up in pertinacity," as Keen himself puts it.

Four years after receiving his medical degree, Keen began surgical practice and teaching in Philadelphia in 1866. He was officially engaged to teach surgical pathology at the Jefferson Medical College, but along with this he became the active head of the Philadelphia School of Anatomy. One of the most interesting chapters in the whole history of medicine might be written concerning extra-mural schools and teachers, called into activity by the failure of the established educational institutions to supply a well rounded medical education. The Great Windmill Street school of William Hunter in London, the private school of Robert Knox in Edinburgh, and the private lectures of Henry J. Bigelow in Boston are well known examples of this extra-academic instruction, but the institution with which Keen now became associated is probably the most famous of its kind in this country. The Philadelphia School of Anatomy was founded in 1820 by Dr. Jason Valentine O'Brien Lawrance, to furnish instruction in anatomy and surgery during the long summer vacation of the University, which began in April and lasted until November. It was never a chartered institution, being operated by its head as a private enterprise, and this remained true throughout its history. Many names well known in American surgery have been associated with this school, among the first being those of Godman, Pancoast, McClintock, Agnew and Keen. Dr. Keen remained at the head of the institution until its dissolution in 1875, an event brought about by the destruction of its buildings incidental to the construction of a new post-office. During this time he taught nearly fifteen hundred students, of whom five became professors in medical schools and one opened the first dissecting room ever established in Japan. The school offered an opportunity for various medical men to work and lecture on subjects other than anatomy; thus DaCosta taught Physical Diagnosis, Brinton gave a course in Op-

erative Surgery, and Weir Mitchell did a great deal of experimental work in physiology. During these nine years Keen taught Descriptive and Surgical Anatomy, Surface Anatomy, Artistic Anatomy, and Operative Surgery.

Even while busily engaged in building a practice and earning an enviable reputation as a surgical teacher, Keen found time for other interests, for we find him, in the following year, 1867, becoming one of the charter members of the board of trustees of the Crozer Theological Seminary, one of the earliest institutions for the technical training of Baptist clergymen in this country.

In common with most young men beginning the practice of surgery, Keen found that personal practice is a creature of slow growth, for we find that even after five years in practice, in the month of June, he saw a total of seven patients, of whom three were charity cases, two disappeared and paid him nothing, and the other two paid him one dollar each. Time did not hang heavy on his hands, in spite of this. In addition to his teaching at the School of Anatomy and at the Jefferson, he was constantly studying and writing. In 1870 he edited Heath's "Practical Anatomy," and in 1873 edited Flower's "Diagrams of Nerves." At about this same time he published a series of "Clinical Charts of the Human Body," and papers on various surgical and anatomical subjects, including "The Anatomy of the Optic Chiasm," "The Ossification of the Atlas Vertebra," "A Case of Asymmetry of the Skull," "A Malformation of the Brain," "Anatomical, Pathological and Surgical Uses of Chloral" and "The Early History of Practical Anatomy." The last mentioned work is a carefully prepared and highly interesting account of the early days of human anatomical study, which Garrison, the well known medical historian, has termed "most valuable for its accuracy and thoroughness." Another example of his pleasing style as an historian of his profession is found in "The History of the Philadelphia School of Anatomy," delivered as the final lecture in the school at its dissolution in 1875, and published in that same year.

During this same period Keen's interest in liberal education was again recognized by his election, in 1873, as one of the Trustees of Brown University, his Alma Mater.

Following the closing of the School of Anat-



omy, Keen became Professor of Artistic Anatomy at the Pennsylvania Academy of Fine Arts, a position which he continued to hold until 1890.

When Keen was at the very start of his professional life, Joseph Lister, a young professor of surgery in the University of Glasgow, became interested in the work of Pasteur in studying fermentation and putrefaction, and undertook to apply these new ideas in the field of surgery. In his attempt to prevent the development of micro-organisms in wounds, he first tried zinc chloride and the sulphides and then carbolic acid, and such was his success with this latter agent that on August 12, 1865, he treated a compound fracture and obtained healing without suppuration. The magnitude of this accomplishment can be better appreciated when it is remembered that at this time amputation as soon as possible was the procedure offering the greatest hope of recovery to a patient with such an injury. Two years later Lister published the results of his studies in a paper "On the Antiseptic Principle in the Practice of Surgery," thus introducing the greatest single advance ever made in surgery. In spite of its importance, however, his work and teaching were long the subject of bitter discussion, and practically no attempt was made to employ his principles in this country until his visit to Philadelphia in 1876. At this time Keen heard Lister give his views, and became fully convinced of their value. Accordingly, on going on service at St. Mary's Hospital during the following month, he adopted the system, being the first Philadelphia surgeon to use the method and one of the first American surgeons to take advantage of Lister's discovery. It was fully five years later before anything approaching general acceptance of the method was obtained.

A steadily increasing surgical practice and further teaching and writing fill the next few years of his life. In 1879, he edited a series of "American Health Primers," and in 1883 produced an excellent edition of "Gray's Anatomy." The following year he was appointed Professor of Surgery in the Women's Medical College, and held this position for the succeeding five years.

From the time of his first work with Weir Mitchell, Keen had been constantly interested in neurological surgery, and kept up his association with Mitchell throughout the latter's lifetime. In

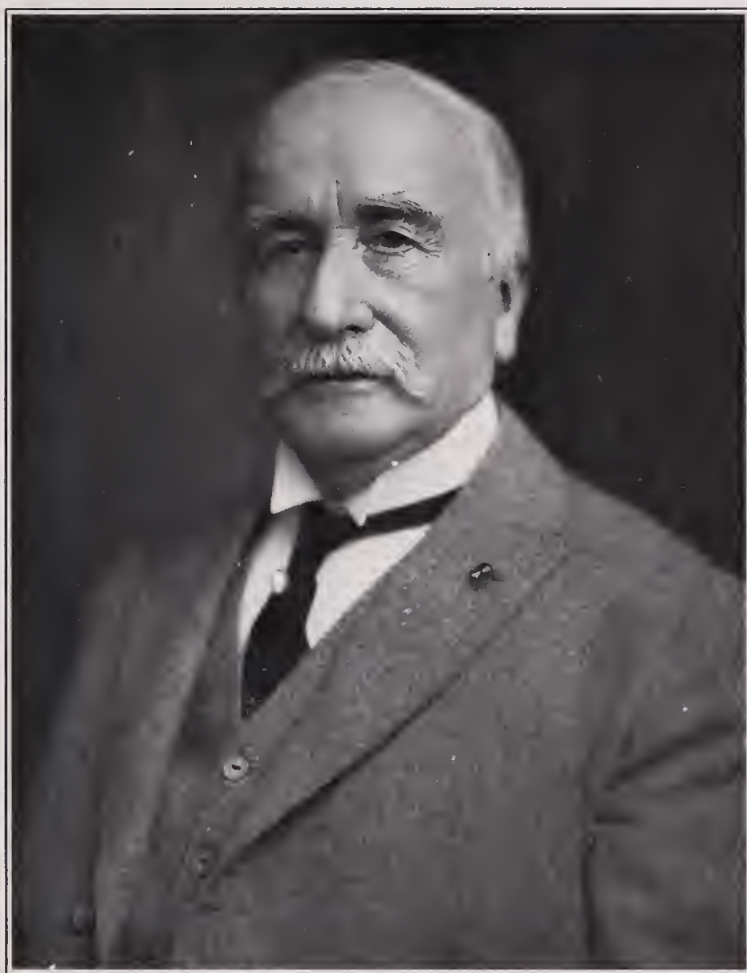
1884 Dr. Bennett of London, for the first time in medical history, localized a tumor of the brain by modern methods, and Mr. Godlee operated upon the patient and removed the tumor. The result, from the standpoint of the patient, was unfortunate, for he failed to survive the operation; but the effect of this demonstration was far-reaching, since it opened an entirely new field for surgical endeavor. In November, 1887, Keen saw Dr. Weir remove an accurately localized tumor from within the cortex of the brain; and in the following month performed his first operation of this sort. The patient was a man of 26, who as a child had fallen and indented the left side of his head, and for about two years preceding had had progressive paralysis and failing eyesight. The pre-operative diagnosis was "pressure on the anterior lobe of the left hemisphere involving the third convolution due to \* \* tumor." With trephine and rongeur an opening 3 by 2½ inches was made in the skull and a tumor almost as large as this opening removed, leaving the lateral ventricle completely exposed except for the scalp overlying the bony defect in the skull. The tumor was found to be a fibroma, apparently caused by constant irritation from a small fragment of the inner table of the skull dislodged at the time of the original injury. The patient made a good recovery, and lived, relieved of symptoms, for over thirty years following this operation. The next year, in the course of a symposium on cerebral localization at the first Congress of American Physicians and Surgeons, Keen presented three patients from whom he had been enabled to remove brain tumors with the help of accurate localization.

As a natural result of this and similar work, Keen's reputation and prestige as a surgeon were now increasing rapidly, and upon the death of the younger Gross, in 1889, he was chosen to succeed him as Professor of Surgery in the Jefferson Medical College. This position he filled until his retirement in 1907. An interesting account of him as a teacher has been recorded by his successor, Dr. J. Chalmers DaCosta, who says, "As a teacher I never heard him excelled. He had that combination of earnestness and clearness that was absolutely convincing of his own beliefs. I never heard him teach a fad in my life. I never heard him teach any of those fanciful things that

PRESIDENT'S OFFICE  
BROWN UNIVERSITY  
PROVIDENCE, RHODE ISLAND

BROWN UNIVERSITY joins the Medical Fraternity of Rhode Island in extending warmest felicitations to Dr. Keen on his ninetieth anniversary. He has stood, like a rock, through his entire career for freedom in research and in teaching, and by voice and pen and high example has constantly summoned his colleagues to climb with him the heights of private integrity and public service. For all of us plain living and high thinking are easier because he has lived, and Brown University is stronger because of his strength.

W. H. P. FAUNCE



WILLIAM W. KEEN, M.D.

are so common; and as an operator, it is needless to say he was a master. He always showed best when the situation was worst. Doctor Keen was always calmer, quieter, kinder, pleasanter, the worse the surgical situation was, and I never saw it get the best of him. He had a favorite expression when he would finally get hold of the situation and control the hemorrhage. He would say, 'Now we have the whipland of it.' It passed into a proverbial expression in the Jefferson Medical College."

At this same time, Keen organized the first surgical textbook ever compiled in the English language, and with Dr. J. William White as co-editor, published "The American Text-book of Surgery" in 1892. The work passed through four large editions, and was one of the most popular texts of its time.

In the following year Dr. Keen assisted Dr. Joseph D. Bryant in operating upon President Cleveland. The political situation was such that absolute secrecy was necessary, for the President was found to have a malignant growth of the left upper jaw. Accordingly the operating was done on a yacht while it steamed at half speed up the East River. At the first operation, the entire left upper jaw was removed from the first bicuspid to just beyond the last molar, and a small portion of the soft palate was also removed. The antrum was found filled with a sarcomatous mass. A second operation was performed a few weeks later to remove further suspicious tissue, and the resulting defect was closed by a cleverly devised rubber plate. Mr. Cleveland survived the operations without recurrence of the growth for over fifteen years, and such was the success of the precautions as to secrecy, that the story was not known until 1917. For a most interesting account of the political situation as well as of the operations performed, Dr. Keen's little book, "The Surgical Operations on President Cleveland in 1893," should be consulted.

In 1895, Dr. Keen's services to Brown University as a Trustee were recognized by his election to the Board of Fellows, a position which he has occupied since that time.

Considering his activity as an army surgeon in the Civil War, it was but natural that with the outbreak of hostilities with Spain in 1898 Keen volunteered, but the war was of such short duration

that his services were not required. In this same year, however, he published a paper on "The Surgical Complications and Sequelae of Typhoid Fever," regarded as one of the most authoritative works concerning these conditions. Non-medical writing also occupied some of his time, for he also published a "History of the First Baptist Church of Philadelphia" in this year.

After more than thirty years in practice, Keen at this time was near the height of his professional career, and many honors began to be given to him. Accordingly we find him elected President of the American Medical Association in 1899, and President of the Philadelphia College of Physicians, the oldest medical society in the United States, in the following year. In the same year, Keen was one of four American surgeons to be made Honorary Fellows of the Royal College of Surgeons of England, on the occasion of the celebration of the centenary of its present charter. In 1901, he was given the degree of LL.D. by Brown University and was made an honorary member of the German Surgical Society.

In company with two of his daughters, in 1901-2, Dr. Keen made a tour around the world, traveling westward from San Francisco, and visiting Russia, Hawaii, Japan, Korea, China, the Philippines, India, Egypt, Greece, and Palestine. In all the countries which he visited, including Persia, and excepting only Java and Turkestan, Keen found old students, anxious to meet and pay honor to their inspiring teacher. Dr. Keen is in the habit of calling Dr. Weir Mitchell, his old preceptor, a "yeasty" man, because of his ability in spurring others on to work; but this demonstration of the far-reaching effect of his own teaching would seem to fairly entitle him to the same descriptive adjective.

From this time on, Keen's life embraces a constantly increasing list of honors granted to him at home and abroad. In 1902 he was made a member of the Clinical Society of London, and in the following year received the degree of LL.D. from North-Western University, and the same degree from Toronto University. In this year he was elected President of the Sixth Congress of American Physicians and Surgeons, delivering as his presidential address a paper on "The Duties and Responsibilities of Trustees of Public Medical Institutions"; a paper which has as much direct



application now as at the time of its delivery. In this paper, in advocating the teaching hospital as a benefit to patient and doctor alike, he says, "Who will be most certain to keep up with the progress of medical science, he who works alone with no one to discover his ignorance; or he who is surrounded by a lot of bright young fellows who have read the last 'Lancet,' or the newest 'Annals of Surgery,' and can trip him up if he is not abreast of the times? I cannot afford to have the youngsters familiar with operations, means of investigation or newer methods of treatment of which I am ignorant. I must perforce study, read, catalogue, and remember; or give place to others who will. I always feel at the Jefferson Hospital as if I were on the run with a pack of lively dogs at my heels. Students are the best whip and spur I know."

At about this same time, an interesting anecdote appeared in one of the Philadelphia daily papers. One winter afternoon, as Dr. Keen was walking along a street in New York, a man slipped on the icy pavement and fell, breaking his leg. Dr. Keen went to the man's assistance, and improvised a splint from his own umbrella and several handkerchiefs. As he was finishing, the ambulance arrived. "You bandaged this rather well," said the ambulance surgeon to Dr. Keen. "Thank you," said the latter. "Oh, not at all," the youth answered. "I suppose that you have been reading up some 'First Aid to the Injured' treatise, eh? They say that a little learning is a dangerous thing, but I must say that you have put to good effect the little that you have learned about surgery. Give me your name and address, and I'll forward the umbrella to you." "I'll give you my card," said Dr. Keen, and did so. The young surgeon flushed as he read the name of one of the greatest of modern surgeons.

In 1905, work was begun on Keen's most marked contribution to surgical literature, his eight volume "Surgery," embodying articles by about a hundred American and British authors. Each volume comprises about a thousand pages, and the last was not issued until 1921. This system is at present one of the most authoritative in the English language. In 1905, also, Dr. Keen received an honorary LL.D. from the University of Edinburgh, and was made an Honorary Fellow of the Royal College of Surgeons of Edinburgh. In the following year, he received the degree of

LL.D. from Yale University, and an honorary M.D. from the University of Greifswald. Interests other than surgery continued to occupy some of his time, evidently, for in this year, we find him elected President of the American Baptist Missionary Union and a Trustee of Vassar College.

In May, 1907, as the delegate of the American Philosophical Society, Keen attended the festival held at the University of Upsala, Sweden, in commemoration of the two hundredth anniversary of the birth of Carolus Linnaeus. This society, the oldest scientific society in the United States, and Harvard University were the only American institutions invited to send delegates, and to these delegates was given the honorary degree of Ph.D., the highest degree within the gift of the University. This was the first time since its founding in 1477 that the University of Upsala granted degrees to any foreigners. Keen has written an interesting account of the ceremonies, in his usual happy style. For example, "After all the degrees in each Faculty had been conferred the orchestra rendered a musical selection. They were all finely rendered, but the music chosen amused us. For the Theologs (I presume they were Lutherans), they gave the 'March of the Priests of Baal'; for the lawyers, 'See the Conquering Hero Comes'; the doctors were welcomed by Schubert's 'Death and the Maiden'; (I concluded, charitably, that she had appendicitis and was rescued from death by the doctor); while the new Doctors of Philosophy were honored by Mendelssohn's 'Wedding March,' which I interpreted as either a reminiscence, an exhortation or a prophecy."

In this year, 1907, Dr. Keen brought to a close forty-one years of active practice and teaching, by retiring from practice and resigning his position as Professor of Surgery at the Jefferson. He was made Professor Emeritus at this time, as a mark of appreciation of all that his untiring work had meant to the institution which he had served so long and faithfully. But this resignation and retirement by no means meant a life of inactivity, for his writing continued without pause.

In 1908 Dr. Keen became president of the American Philosophical Society, and in this same year made a visit to Italy, when he was made an honorary Fellow of the Italian Surgical Society and was granted an audience with the Queen of Italy.

No account of the life of Dr. Keen would be at all complete without some reference to his long-continued and very effective fight in support of animal experimentation as a source of valuable contributions to our knowledge of the treatment of disease. Throughout his entire professional life, he has neglected no opportunity to assail vigorously that philocanism which would place the lives of a few animals before those of countless numbers of human beings. Thus in 1885 we find him delivering an address on "Our Recent Debts to Vivisection" at the Commencement of the Women's Medical College; and in 1893 publishing in Harper's Magazine an article on "Vivisection and Brain Surgery." In 1901 he published correspondence with the American Humane Association, under the title of "Misstatements of Anti-vivisectionists," in which he showed the false and misleading nature of much of their propaganda. In 1910 he wrote several of the "Defence of Research Pamphlets," published by the American Medical Association, for example: "What Vivisection Has Done for Humanity" and "Modern Antiseptic Surgery, and the role of experiment in its discovery and development." In addition to these direct attacks on anti-vivisection, we find scattered through a great many of his papers and addresses continued arguments for experimentation. It is fair to say that animal experimentation has had no more valuable protagonist in the history of medicine than Dr. Keen.

Honors continued to be paid to Dr. Keen following his retirement. In 1911, the University of St. Andrews gave him an honorary LL.D. In the summer of this year, while Dr. Keen was in Berlin, he developed symptoms of what appeared to be a most serious illness, and returning to this country as soon as possible, went to Rochester, Minnesota, for treatment. Dr. William J. Mayo operated upon Dr. Keen and discovered a condition much less serious than had been feared, and one which he was able to remedy completely, although this involved a fairly extensive operation. With his characteristic ability in surmounting obstacles, Dr. Keen recovered promptly, and in the following year, in celebration of the fiftieth anniversary of the awarding of his medical degree, Jefferson Medical College granted him an honorary Sc.D. In 1913 he was made an honorary Fellow of the American College of Surgeons.

Nineteen hundred and fourteen marked the publication of his book, "Animal Experimentation and Medical Progress," in which he restates his convincing arguments for increased use of this method of investigation. In this same year Keen was elected President of the International Surgical Congress which was scheduled to meet in Paris in 1917. He was the first American surgeon to be so honored; Kocher, a Swiss; Czerny, a German; Champounerie, a Frenchman; and Depage, a Bel-

gian, having been the previous recipients of this distinction. Because of the war, the congress was not held until 1920, when Dr. Keen presided. On his return, he remarked that he was sure to live at least five years longer, for, he said, "it takes five years to live down a thing of that sort."

In 1915, his daughter, Dora Keen, discovered a glacier in Alaska which she named the Brown University Glacier in honor of her father. The glacier is the main source of the Harvard Glacier, and flows from the Chugach Mountains into College Fjord at the northwestern extremity of Prince William Sound. Dr. Keen was selected as the speaker at the Ether Day exercises at the Massachusetts General Hospital in this same year, when he discussed "The Dangers of Ether as an Anesthetic."

In 1917 he delivered the Colver lectures at Brown, taking as his subject "Medical Research and Human Welfare," and in these he traced the enormous advance of medicine during his professional lifetime. In the same year he published a book, "The Treatment of War Wounds."

In 1919 he was given the degree of LL.D. by the University of Pennsylvania, and in 1920 the degree of Sc.D. by Harvard University. In the same year he was created an Officer of the Order of the Crown of Belgium by King Albert. In the following year he wrote his little confession of faith entitled "I believe in God and in Evolution," which, in spite of the mass of literature evoked by the Dayton trial, remains one of the clearest expositions of the subject yet produced. In this same year he was awarded the Henry J. Bigelow Medal for achievement in surgery, and on this occasion he delivered a very interesting address concerning "Sixty Years of Surgery." In 1922 he was made a Foreign Associate of the French Academy of Medicine, and was given the degree of Doctor Honoris Causa by the University of Paris in the following year. In 1924, he published another non-medical literary work, "The Life Everlasting."

This month marks the ninetieth birthday of this Dean of American Surgeons. He is now, as in the past, an interested student of modern surgery, a constant and very effective worker for the advancement of science, and a continuing source of inspiration to all who would follow the profession which he has so greatly honored.

#### ACKNOWLEDGMENT

This incomplete account of the manifold activities of Dr. Keen in his unusually full and busy career is based chiefly upon material obtained from his own writings; from data in the Library of Brown University; and from a chronological list of Dr. Keen's honors and degrees carefully compiled by Professor Herbert E. Walter, to whom my sincere thanks are due.



# THE RHODE ISLAND MEDICAL JOURNAL

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Meets the first Thursday in September, December, March and June

H. G. PARTRIDGE	<i>President</i>	Providence
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### DISTRICT SOCIETIES

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FENWICK G. TAGGART	<i>President</i>	East Greenwich, R. I.
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Meets the third Thursday in each month

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Meets the second Thursday in January, April,  
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#### WOONSOCKET

Meets the second Thursday in each month excepting  
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EDWARD L. MYERS	<i>President</i>	Woonsocket
WILLIAM A. KING	<i>Secretary</i>	Woonsocket

**R. I. Ophthalmological and Otological Society**—2d Thursday—October, December, February, April and Annual at call of President  
Dr. J. J. Gilbert President; Dr. M. J. O'Connor Secretary-Treasurer.

**The R. I. Medico-Legal Society**—Last Thursday—January, April, June and October. Dr. Creighton W. Skelton President; Dr. Jacob S. Kelley, Secretary-Treasurer.

## EDITORIALS

### WILLIAM WILLIAMS KEEN

When the Civil War was being fought a young surgeon, then recently graduated from Jefferson Medical College, served his country from 1862 to 1864 in the hospitals of Philadelphia; during the Spanish-American War the same surgeon, now one of the pre-eminent in his profession, was found in active service; and yet again, so ardent was his patriotism, so inexhaustible his energy,

that when America entered the Great War he put on once more the uniform of his country to give freely of his strength and his experience. The young surgeon of the Civil War was Lieutenant Keen, the medical officer of the Great War was William Williams Keen, the Nestor of American medicine whose ninetieth birthday is soon to be celebrated. But there is more than this, for one of his early patients had been in the armies of the Great Napoleon, and his grandmother often told him of her conversations with General Washington. Thus his memories span the whole course of our Republic's existence.

For us who are citizens of Rhode Island, the most pleasing thing about Dr. Keen's extraordinary career is that although he was born in Philadelphia in 1837, he began and completed his collegiate life in Providence, being graduated from Brown University in the class of 1859. Like so many others of her illustrious sons, lawyers, statesmen, physicians and men of letters, he has always been devoted to the welfare of his Alma Mater and for more than fifty years, as Trustee and Fellow, has guided and fostered her growth in numbers, in influence and in distinction. Nor has the University been unmindful of her distinguished alumnus, for by conferring her degrees upon him, she has honored herself as well as him; and by inviting him to deliver the Colver Lectures in 1917, heard from his own lips the story of medical research and human welfare in the making of which he had himself played no inconsiderable part.

We who are younger men, in years if not in spirit, find it difficult to realize that everything except vaccination, which is especially characteristic of modern medicine had its birth in the lifetime of this remarkable physician. He saw the dawn of modern anesthesia; when he began to practice, the methods of controlling hemorrhage were crude and primitive; the knowledge of germs and germicides was still in the womb of the future; the use of the clinical thermometer was uncommon and fever was estimated by placing the hand on the patient's neck or arm; operations upon the head, thorax and abdomen were not in the realm of practical surgery because of the tragedies which followed sepsis; in a word, the things which to us are matters of daily routine were then in the making or perhaps not known at all. If then we would apprehend the real significance of Dr. Keen's career, we shall remember that if we are in the possession of a great dominion and commerce of science it is because his argosies were on the ocean and his camels upon the desert. We can read the marvelous story in his own works, beginning with *Reflex Paralysis and Gunshot Wounds and Other Injuries of Nerves* and ending with his monumental *System of Surgery*.

But great as are the qualities of his intellect, who will say less of his qualities of heart. By his intellect he has gained the admiration of his fellows, by his heart he has won the tribute of their

affection. The world of his professional activities has been always too small to contain him, and so he has gone abroad into the busy world of men, mingling with them and inspiring them, ever engaged in works of social betterment, encouraging young men by precious advice and noble example, meeting in combat those who would obstruct the advance of science by experimentation, confessing manfully his faith not in Nature only but in Nature's God, and withal by the kindly influence of his gracious ways through all these years, making the world a better place because of his living in it.

And so the RHODE ISLAND MEDICAL JOURNAL, as being the mouthpiece of his brothers in medicine in the home of his alma mater dedicates to him, in loving admiration, this its Commemorative Number, wishing him health and happiness and all good things on the ninetieth anniversary of his birth.

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### INFANT MORTALITY

In one of his books Professor Rosenan makes this statement, that "being a baby is one of the most hazardous occupations in the United States." In the early days before the infant was given much consideration, this was undoubtedly true, but with the present day methods, it is becoming less so.

One of the arguments used by the opponents of rescue methods was that saving more infants would mean the survival of the unfit with the consequent added drain on society in the future. They contended that saving these infants would result in a lowered vitality and the community would have to assume more responsibility in the future.

The proponents of this argument of the survival of the fittest have been proven wrong. Many of these infants were not unfit, but merely were unfortunate in their heredity, environment or social status. When these factors were improved, the infants soon took their place on a par with their more fortunate contemporaries.

A further and more convincing proof that the saving of these infants has not been a drain on society is shown by the increase in the expectancy of life. Twenty years ago, when the infant mortality was about 150 per 1,000 births, the expectancy of life was about 45 years, whereas now

with an infant mortality of 75 per 1,000 births, the expectancy of life has increased to 55½ years.

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### CHANGELESS DISEASES

During the past few years attention has been drawn to the various aspects of life of early man. Relics of these times that shed light on his mode of living and activities have been eagerly sought and studied and the results have been given wide publicity. One phase is of particular interest to the medical profession and that is the diseases to which he was subject.

We are more indebted to the ancient Egyptian embalmers than to anyone for such data, because our information is obtained almost alone from mummies. A method has been devised whereby their body tissues have been sufficiently restored to normal to make possible careful microscopic study of them. Among some of the more noteworthy and grosser maladies described was a case of Pott's disease, probably the earliest record of tuberculosis. In another body was unmistakable evidence of hook worm disease. Healed fractures were common. Although numerous drawings of dwarfs are not proof of cretanism it is fair to assume that diminished thyroid activity was of common occurrence. Further studies will yield much valuable information and will be of increasing interest.

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### MEMORIAL

#### DR. FREDERICK G. PHILLIPS

Dr. Frederick George Phillips died at his home in Providence on July 25, 1926, of acute cholecystitis. He was born in Providence March 24, 1877, a son of the late Charles A. and Sarah W. Phillips. He received his early education in the public schools of Providence and entered Brown University in the class of 1901. Leaving college at the end of his freshman year, he spent a year working for his father, who was a contractor and builder. He then entered the College of Physicians and Surgeons of New York City, from which he was graduated in the class of 1902. After serving a surgical internship at the Rhode Island Hospital and later acting as interne at the Providence Lying-In Hospital, he located in Providence as a general practitioner.

Dr. Phillips was, to a marked degree, the fortunate possessor of that rare combination of politeness, warmth of geniality and good-fellowship. Those characteristics, coupled with a willingness to work and an untiring devotion to his chosen profession, resulted in his building up an extraordinarily large general practice with particular attention to surgery during the past ten years of his life. In addition to his routine work as a practitioner, for many years he gave freely of his time as physician to the Out-Patient Department of the Rhode Island Hospital. He was one of the volunteer physicians who, with the Red Cross Relief expedition, hastened to the relief of the victims of the munitions explosion in Halifax, Nova Scotia, and he gave freely of his time as a draft physician during the World War.

He was a member of the Providence Medical Association, the Rhode Island Medical Society and the American Medical Association and served most acceptably on many committees of those Societies. The valuable painting of Pasteur which adorns the walls of our State Medical Library building was presented to the Society by Dr. Phillips several years ago. Dr. Fred Phillips was generous to a fault. It can be truly said of him that he was always doing something for some one else. For many years he maintained a beautiful home, consecrated to the care and comfort of his aged parents, an invalid brother, his unmarried sisters and other members of his father's large family.

His mind remained clear and active up to the last hours of his life and he was making plans and giving directions with which to meet every ensuing detail.

A few days before his death he married Miss Elizabeth Louise Foster of this city. Thoroughly devoted to each other for many years, they postponed their marriage from time to time until certain obligations to their families should be fulfilled.

It is extremely difficult to choose appropriate language with which to adequately extol the life of such a man as Dr. Phillips, but enough has been written to remind us of his striking personality, sterling character and devotion to his work which he energetically continued, frequently into the late hours of the evening, at the expense of much needed rest. His large following of patients and friends were shocked at the news of his sud-



den and untimely death. Our medical societies have lost one of their high class members and Providence one of its best citizens.

DR. EDMUND CHESEBRO  
DR. CHARLES HAWKES  
DR. ALEX. BURGESS

October 4, 1926.

## SOCIETIES

### THE RHODE ISLAND MEDICAL SOCIETY COUNCIL

Nov. 22, 1926. Medical Library.

The regular meeting of the Council was held this date at 4:30 P. M., the President, Dr. H. G. Partridge, presiding.

The Treasurer, Dr. J. E. Mowry, presented the budget for 1927 as follows:

#### BUDGET 1927

Collations and Annual Dinner.....	\$600 00
Expenses of Secretary (Sec. hire).....	75 00
Stenographer at Meetings.....	20 00
Delegate to American Medical Association....	100 00
Printing and Postage.....	125 00
Fuel .....	650 00
Electricity .....	50 00
Gas .....	50 00
Telephone .....	75 00
City Water.....	15 00
House Supplies and Expenses.....	200 00
House Repairs.....	300 00
Librarian .....	1,404 00
Janitor .....	600 00
Books and Journals (including Ely Fund \$74)	150 00
R. I. Medical Journal.....	400 00
Safe Deposit.....	5 00
	<hr/>
	\$4,819 00

#### INCOME FOR 1927

Annual Dues.....	\$4,160 00
Interest from Harris Fund.....	290 00
Interest from Ely Fund.....	74 00
Providence Medical Association.....	450 00
Use of Building.....	100 00
From Journal.....	300 00
	<hr/>
	\$5,374 00
	4,819 00
	<hr/>
	\$555 00
Balance in Bank November 1, 1926.....	\$2,366 98

#### HARRIS FUND

Southern Illinois Light & Power Co.....	\$120 00
Pacific Gas & Electric Co.....	60 00
Iowa Power & Light Co.....	110 00
	<hr/>
	\$290 00

The Council voted to approve the budget as presented and to refer it to the House of Delegates with the recommendation that it be accepted.

Adjourned.

J. W. LEECH, M.D., *Sec'y.*

### HOUSE OF DELEGATES

Nov. 22, 1926.

The regular meeting was held this day and called to order by the President, Dr. H. G. Partridge, at 5 P. M. The report of the Council was made by the Secretary and the budget for 1927 presented by the Treasurer was adopted, following the recommendation of the Council.

The resignation of Dr. F. T. Fulton as Chairman of the Committee on Legislation, State and National, was accepted with regret and with appreciation of his untiring efforts during his tenure of office.

Dr. Charles F. Gormly was elected a member of the Committee for Legislation, State and National.

It was voted that the dues for 1927 be fixed at \$10.00.

The President reported relative to the New England Medical Council, an organization of representatives of all the New England States for the purpose of discussing problems which concern the practice of medicine, medical education, public health, legislation, and in general all matters relating to the welfare of physicians of New England.

On motion of Dr. Jones, seconded by Dr. Kingman, it was voted by the House of Delegates to approve the formation of a New England Medical Council.

The Secretary read a communication from the American Medical Association relative to immediate relief in disaster. The plan in brief contemplates the appointment of the President of the State Society as state director and the Presidents of the County Societies as regional directors for immediate medical relief in disasters, to act before organized relief such as the Red Cross can take charge of the situation. The discussion of the subject brought out the possibilities of such an organization in this state duplicating the plans of the local chapters of the American Red Cross. It was voted that the Secretary be instructed to communicate with the officials of the American Red Cross in Rhode Island to determine whether or not in their opinion the institution of such an organization would conflict with or duplicate the work of relief in disaster already planned by the Red Cross in this state.

The Virginia State Medical Society requested the co-operation of the physicians of Rhode Island

in raising a fund to purchase the birthplace of Dr. Walter Reed and to provide for the establishment of a Walter Reed Chair for research at the University of Virginia. The President appointed the following committee: A. T. Jones, Chairman, F. T. Fulton, C. D. Sawyer, C. L. Philips, F. B. Sargent, H. L. Johnson, W. F. Flanagan, W. C. Gordon, M. B. Milan, R. C. Robinson.

Adjourned.

J. W. LEECH, *Sec'y.*

The regular quarterly meeting of the Rhode Island Medical Society was held December 2, 1926, at 4 P. M. at the Medical Library, the President, Dr. H. G. Partridge, presiding.

The minutes of the meeting of the Council and House of Delegates was read by the Secretary.

The President made announcements of the following appointments: Delegates to the Maine Medical Society—Dr. B. L. Towle, Dr. C. E. Hawkes. Delegates to the New Hampshire Medical Society—Dr. H. B. Sanborn, Dr. R. C. Robinson. Delegates to the Vermont Medical Society—Dr. F. G. Taggart, Dr. W. C. Gordon. Delegates to the Massachusetts Medical Society—Dr. Roland Hammond, Dr. A. A. Barrows. Delegates to the Connecticut Medical Society—Dr. I. H. Noyes, Dr. C. O. Cooke. Member at large of Board of Trustees of the Medical Library—Dr. H. B. Potter. Anniversary Chairman—Dr. L. C. Kingman.

Dr. Skelton presented for Dr. Sherman of Newport, photographs and jaw bone of a shark from which, on dissection, was recovered a human arm. Papers:

1. "Conservation of Vision," Dr. H. C. Messenger, Providence, R. I. Illustrated by lantern slides. This paper was discussed by Drs. Hawkins, Leech, Dowling and Messenger.
2. "Influenza—Its Preliminary Complications," Dr. A. M. Burgess, President. This paper was discussed by Drs. E. H. Wing, Fulton, Sundlind, Perkins, Mathews and Richardson.
3. "Cæsarian Section—Its Types and Indications," Dr. Barton Cooke, Hirst, Philadelphia, Professor of Obstetrics at University of Pennsylvania. Numerous lantern

slides illustrated the steps of the various types of Cæsarian Operations.

Discussion opened by Dr. E. S. Brackett and continued by Dr. I. H. Noyes and Dr. Hirst.

A collation was served after adjournment.

J. W. LEECH, M.D., *Secretary*

#### PROVIDENCE MEDICAL ASSOCIATION

The regular monthly meeting of the Providence Medical Association was called to order by the President, Dr. Roland Hammond, Monday evening, October 4, 1926, at 8:50 o'clock.

The records of the last meeting were read and approved.

The President reported that the Committee on Clinical Conferences had started the clinics and wished to call particular attention to the one at Wallum Lake by Dr. Barnes.

Dr. Chesebro read an obituary on Dr. Fred G. Phillips.

It was voted that a copy be sent to the family and a copy spread on the records.

The Standing Committee having approved their applications the following were elected to membership: Cecil Calvert Dustin, Jessie Merrill Gibson, John Picozzi, Meyer Saklad.

The first paper of the evening by Dr. Chas. O. Cooke and Dr. Peter P. Chase, "A Report on a Method for Treating Fracture of the Femur," was read by Dr. Chase. It described a method devised by an Australian in which the leg lies upon pillows with extension attached below the knee and with a series of pulleys alignment and length is maintained, with flexion at the knee. Because of the simplicity, comfort and apparent efficiency, it is ideal for children and seems of value for adults. Diagrams and a photo were shown. Dr. Cooke opened the discussion which was continued by Drs. Leonard, Kingman, Hawkes, Smith, Barrows, Cutts and Chase.

The second paper on "Intestinal Obstruction" was read by Dr. Edgar B. Smith. Emphasizing the gravity, he spoke of the causes, putting appendicitis first. He then reviewed the symptoms and urged early intervention, quoting Moynihan, "When obstruction is suspected operation is indicated."

The life saving value of high jejunostomy was dwelt on and in operating little rather than too much surgery was pleaded for.



An instructive table was given, showing the steadily increasing death rate with delay in operation.

Dr. Pitts opened the discussion and Drs. Hoyer, Barrows, and Smith took part. Dr. Richardson gave a very encouraging report on the use of measles serum.

The meeting adjourned at 10:45 P. M. Attendance 74. Collation was served.

Respectfully submitted

PETER PINEO CHASE, *Secretary*

#### PAWTUCKET MEDICAL ASSOCIATION

The Pawtucket Medical Association held their regular monthly meeting at the Jack o' Lantern, 33 Summer street, Pawtucket, on Thursday evening, November 18, 1926.

Resolutions on the death of Dr. John N. Venick were read by Dr. Frank Lutz. The Secretary was requested to forward one set of resolutions to the family of the deceased, and to place one set on the records of the Association.

A committee was appointed to confer with the Red Cross officials, in regard to a better understanding between the nurses' responsibilities and the individual practice of the physician.

Dr. Charles L. Farrell and Dr. Irving H. Farrell were elected members of the Association.

A very interesting paper was read by Dr. Ira H. Noyes of Providence. Subject: "Gynecology in General Practice."

Meeting was adjourned and collation served.

LESTER J. GILROY, M.D., *Secretary*

### HOSPITALS

#### THE MEMORIAL HOSPITAL

The following is a copy of the minutes of the Memorial Hospital Staff meeting held November 4, 1926:

Meeting called to order at 9:15 by President Wheaton. Report of Secretary read and approved. Record of attendance taken. Thirty-two members were present. Report of surgical service given by Dr. J. L. Turner. Report of orthopedic service given by Dr. H. E. Harris. Report of pediatric service given by Dr. E. A. McLaughlin. Report of medical service given by Dr. J. L. Wheaton.

An interesting paper was read by Dr. Banice Feinberg on "Review of Tuberculosis in Children." Notes: *Mode of Entry of Bacilli*—Respiratory and alimentary tract. *Media*—Milk. *Lodge*—In lymph nodes and other body organs secondarily. *Diagnosis*—Must be made while disease is in lymph nodes. *Prognosis*—Infancy fatal. 50% in second year. *Treatment*—Rest, sunshine, cod liver oil, etc. Paper discussed by Drs.

McLaughlin, Kelley and Bates. Discussion closed by Dr. Feinberg.

Dr. Wheaton brought before the meeting a letter to the Staff in regard to the attendance at Staff meetings. General discussion by members of the Staff.

Motion passed that a committee of three be appointed to look up attendance at Staff meetings in other Rhode Island Hospitals and report at the next meeting. Committee: Drs. E. S. Wing, J. L. Dowling, R. C. Bates.

Motion passed that the letter from the Trustees be placed on file.

Motion passed that dues for the year 1926 be \$1.00 per member.

Adjourned at 10:00 P. M.

JOHN F. KENNEY, M.D., *Secretary*

Copy of the meeting of the Memorial Hospital Staff held December 2, 1926:

Meeting called to order by President Wheaton at 9 P. M.

Report of the Secretary was read and approved. 25 members were present.

Surgical report read and comments made on "Appendicitis" by Dr. Jones.

Medical report read by Dr. Wing and several cases discussed.

Dr. Earl Kelley reported several cases for children's service.

Dr. F. B. Sargent reported for the Nose and Throat Clinic.

Dr. J. L. Dowling reported for the Eye Clinic.

Dr. E. S. Wing presented a report for the Committee on attendance rules. Remarks also made by Drs. Bates and Dowling of the same Committee.

Motion was made that the Executive Committee of the Board of Trustees be notified of the findings of the Committee named by the staff to investigate other hospitals in Rhode Island in regard to the attendance at Staff meetings. They report that the attendance at our meetings is very much better, in proportion to the size of staff and the size of the hospital, than any other hospital in the State. It is recommended that the spirit of the staff members is that they will make every effort to attend as many meetings as possible.

An interesting paper on "Endocervicitis as Affecting Pregnancy" was read by Dr. George Ronne. Discussion by Dr. Jones.

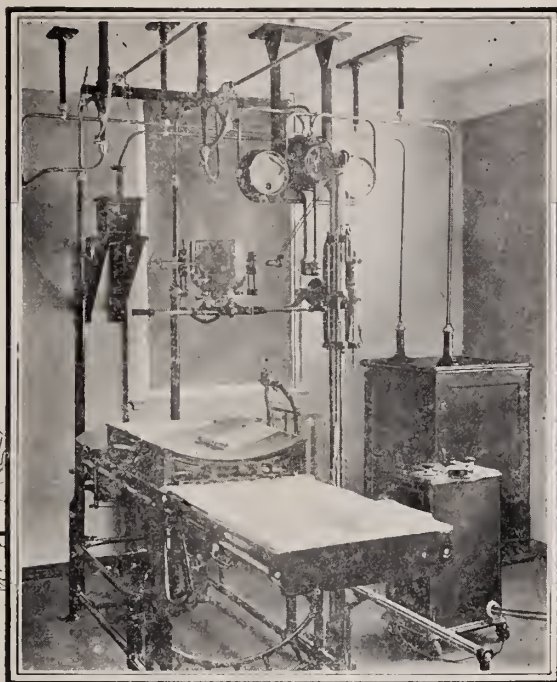
The following officers were re-elected for the year 1927: President, James L. Wheaton, M.D.; Vice President, John E. Donley, M.D.; Secretary, John F. Kenney, M.D.; Treasurer, Lamert Oulton, M.D.

Meeting adjourned at 10:15 P. M.

JOHN F. KENNEY, M.D., *Secretary*

MEMORIAL HOSPITAL STAFF





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# THE RHODE ISLAND MEDICAL JOURNAL



Owned and Published by the Rhode Island Medical Society. Issued Monthly

VOLUME X } Whole No. 209 PROVIDENCE, R. I., FEBRUARY, 1927 PER-YEAR \$2.00  
NO. 2.. } SINGLE COPY 25 CENTS

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# THE RHODE ISLAND MEDICAL JOURNAL

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## ORIGINAL ARTICLES

### THE PRESIDENT'S ANNUAL ADDRESS\*

By ROLAND HAMMOND, M.D.

PROVIDENCE, R. I.

The By-Laws of this Association require that the President shall deliver an address at the Annual Meeting with special reference to the work and needs of the Association. During the seventy-eight years of its honorable existence seventy-eight addresses have been delivered, each differing with the personality of its author. Some have adhered to the mandates of the By-Laws, others have read a purely scientific paper, while many have pointed out the glorious achievements of the members of a previous generation.

This evening I should like to contemplate with you the possible future of this Association and its members a generation hence.

The Association is in a healthy condition, except for the fact that it should include in its membership a larger number of the regular physicians of the community. The meetings are well attended and the programmes deal with a wide range of subjects. The social hour following the meetings serves to promote good feeling, and sees the beginning of new friendships and the cementing of old ones. We are performing our function as a scientific and social society, but we are not abreast of the times in our relation to public health and welfare work. This may be described as the economic function of the district society. The physician can no longer maintain a passive attitude in public affairs. If he allows his prerogative to be usurped and shirks his duty, he throws wide open the door for paternalism and state medicine.

Although surrounded by quacks and charlatans and engaged in competition with irregular practitioners, the physician continues to be the court of last resort by the public at large in cases of serious illness. More than ever is he consulted by the intelligent layman for minor ailments and the

beginnings of more serious maladies which may be checked or alleviated by timely intervention. As the value of medical treatment in the early stages of disease becomes more and more impressed upon the public at large, physicians will find greater fields of usefulness open to them.

But the public is constantly demanding better training among physicians, and rightly so. Medicine is a science, although unfortunately not an exact one, and rests upon the foundation stones of research and experiment. Unless we are prepared to avail ourselves of the advances in science constantly being brought forward, we cannot hope to maintain medicine on the exalted plane on which it has rested for centuries.

The clinician of the future should be taught certain facts by a full time scientific worker, but his greatest instruction should come from one who is a practising doctor, well grounded in facts and trained in laboratory and clinical methods. Specialties may be further sub-divided for purposes of instruction for intensive work in one subject. More attention should be given to contact with the patient and family. This has always been a weak point in medical education and usually has been learned by bitter experience. Of late years emphasis has been laid upon scientific facts and laboratory data at the expense of the patient's peace of mind, as well as that of his family and friends, to say nothing of the actual treatment of the case in hand. A return to the old relation of preceptor and student, in a modified form suited to present day requirements, would be a very desirable addition to our medical school and post-graduate curricula. The attempts at post-graduate instruction in this State have been well received and should be continued.

In the midst of the present social upheaval one may well wonder what position the physician will eventually occupy in the scheme of things. This all depends on our own conduct. We should take lessons from other guilds and pin our faith upon intelligent organization. If physicians are to assume that leadership necessary to medical progress they must evolve an outline of purpose, a constructive, forward-looking programme of

\*Read before the Providence Medical Association, January 3, 1927.

things to be done and of methods by which co-operation on the part of the public must follow their leadership. It may be expected that rules and regulations both of the state and federal government will continue further to embarrass both physician and patient. State medicine, government medicine, socialized medicine,—call it what you will—may continue to expand until the majority of physicians and of people as well will become elements in some vast government machine; but even so, private individual arrangements for personal and family health service are likely to continue indefinitely to demand skillful physicians to care for the most intelligent members of society so long as a vestige of personal liberty exists.

In countries where medicine has become largely a government function, the individual who can select and compensate his own physician on a personal basis still is the envied citizen, and the physician who gives only such service is the envied one among his colleagues. The opportunities to serve that portion of the public who desire medical service although surrounded by government regulations, enforced by salaried inquisitors, will probably continue as the method of choice of the elect and a goal well worth striving for by worth while physicians.

To quote from an editorial in the *Journal of the American Medical Association* for October 30, 1926:

"The intrusions and interferences are not of the physicians' choosing but are being forced increasingly on physicians and their clients by the unwarranted attempts at expansion of government into phases of personal health which violate every tradition of our people and are repugnant to those who serve and those served by a great profession.

"Society, acting through representative government, has responsibilities in medical and health matters as in other fields, but the line of demarcation between what is public and what is personal in matters of health must not be pushed back by government bureaus until government has invaded the privacy of the home and stands at the bedside of the individual."

It has been well said that there are too many medical meetings at the present time.

It may also be said that there are too many clinics. There can be no objection to the free

clinic connected with established public hospitals. In other centres where medical schools exist such clinics are necessary for teaching purposes. In cities without medical schools these clinics serve an educational purpose in providing experience for the staff and in training leaders of the profession. The private clinic, of course, does not come under the scope of this discussion.

Many clinics are being established in this country and their number is rapidly increasing. In numerous instances the need of such clinics is questionable, and the aims of their founders should be open to searching scrutiny. For example: a certain group desires to erect a hospital of modern character. A survey of hospital conditions is made by an outsider, and the community is declared underhospitalized. A campaign is instituted, money raised, a hospital built and equipped, only to find that it is but partly utilized. The hospital supposed that it could draw upon a certain clientele, but the fickle public seeks hospital accommodations elsewhere and this charity leans upon the community for support.

Social service has developed so rapidly in this country of late years as to reach the dignity of a profession. In every community there are many kindly people who look upon social service with the fervor of religious zealots. The growth of wealth and prosperity in this country have made the people sensible of their responsibilities towards those less fortunate than themselves, and this has given an impetus to all forms of sociological endeavor. College students are taking up this work with the spirit of the crusader, inspired by professors who consider such service idealistic. They are alert to establish new forms of charity and their activities often center around clinics for the healing of the sick.

Professional social workers are rapidly supplanting zealous amateurs, and it is necessary for them to make good and to show results to their boards of directors, just as it is to be successful in any other calling in life. The result of this activity is that the highways and byways are combed for patients to fill these clinics. Duplication of effort follows. Several societies compete for the honor of assisting the same unfortunate individual to obtain medical aid or to rise in the world.

At the present time a wave of enthusiasm has spread over this country and to a lesser extent



the rest of the civilized world, for the purpose of alleviating the unfortunate condition of the crippled child. No more worthy object could be conceived nor one more likely to bear fruit in coming generations than this charity, fostered by kindly and enthusiastic people.

There are several organizations in this community working with the same idea in view to aid this class of dependents, but their activities are not co-ordinated. There is duplication of effort, and money is expended from several funds for the same purpose, which would not happen with better co-operation and efficiency. There are funds in this state for the relief of crippled children, the income from which is not being completely expended, because testamentary requirements must be complied with. Patients are being transported outside the State at large private expense for treatment in other institutions.

The moral of this tale is clear. How much better from every point of view if these various organizations should get together and pool their resources, making use of already existing local institutions, well equipped to take care of the medical treatment of these cases, and the social rehabilitation of the patients afterwards. Special funds and bequests could be established so that the identity of the donors would not be lost. There are numerous ways of securing the publicity so necessary for maintaining interest in these funds in future generations.

Funds donated or bequeathed by will should not be restricted to certain uses. Times change and customs with them, so that the charitable needs of one generation may be out of date in the succeeding generation.

Can the activities of several organizations, all seeking to accomplish one beneficent purpose, such as the care of one class of the indigent sick, be co-ordinated and put to better use? I believe so. This desirable end will eventually be achieved when the thinking public realizes that this duplication of effort and money involves a large economic waste.

Physicians are the only class who can view this problem from a correct angle and in its various aspects. We are best situated to know the need for more clinics. This Association might well go on record and require that no free clinics shall be established without first submitting plans to this Association or to the State Society for en-

dorsement or rejection. Such plans should be comprehensive, showing the need of the proposed clinic, its location, the kind of people it intends to serve, the nature of the service to be rendered, an account of its methods of financing and a complete list of the members of the medical staff and the officials of the institution that is fathering it.

Special committees of the county and the State Society might be appointed to consider matters of this kind and in case such a clinic is endorsed, the committee could serve the clinic in an advisory capacity.

These same committees could serve a most useful purpose in helping to co-ordinate the activities of various social organizations so that there will be more efficiency in their work and less duplication of effort, with the resultant saving of both time and money.

Not the least of the disasters of free clinics is that in too many instances they serve, not patients who cannot pay for services, but a grafting and self-pauperizing element who will not pay.

A potent, readily available remedy is within control of county and state medical societies.

Why not use it?

---

## REPORT ON A METHOD FOR TREATING FRACTURE OF THE FEMUR\*

BY DRs. P. P. CHASE AND CHARLES O. COOKE  
PROVIDENCE, R. I.

Last fall Dr. Cooke and others reported seeing in Philadelphia, a method of treating fracture of the femur which had been devised by Dr. R. Hamilton Russell of Melbourne, Australia, a very original minded person as is also shown by his views on the treatment of herniae. This method was spoken of so well by the Philadelphia men and is so simple in its general details that we immediately began to use it at the Rhode Island Hospital and several services have tried it out with more or less earnestness and enthusiasm. Fracture of the femur is a difficult and unsatisfactory thing to treat as is shown by the numerous methods enthusiastically advocated and the results achieved. There is necessarily a long stay in bed, frequently with much discomfort and even when the length and

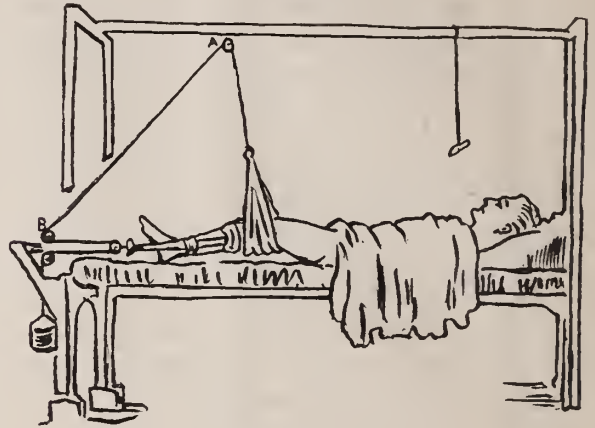
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\*Read before the Providence Medical Association, Oct. 4th, 1926.

alignment of bone is good the stiffness of joints and muscles may linger for long periods. Hence suspension treatments with resulting freedom of movement for the patient have become popular and the smaller the amount of apparatus on the patient, the better, if it gets results.

When the femur is broken we find a shortening due to the tonic contraction of the muscles. If this is not combated, it steadily continues until there is great shortening and this is accompanied by much pain. It has long been recognized that a steady pull on the leg relieves the patient's discomfort. Formerly adhesive straps for extension have been brought up the thigh to the point of fracture or higher. This was because all the muscles were supposed to be pulling up the lower fragment and a pull entirely below the knee, it was feared, would put a heavy strain on the ligaments. Russell points out that the shortening force is practically all in the hamstrings and the rectus femoris which attach to the tibia and fibula. The lower fragment of the femur has little pull upon it and hence the knee ligaments will not be stretched. This is corroborated by war experience where the emergency dressing for fracture of the femur had its pull from the ankle. The men did not complain of a pull on the knee and it apparently was not injured. When we manipulate a leg for examination in a fracture case, we find that we put one hand under the knee and pull up and somewhat toward the foot, the other hand grasping the ankle and pulling in the line of the lower leg. The knee is now somewhat bent and a steady pull in this manner will probably keep the patient from complaining. Russell now devised an apparatus to embody these principles. He puts adhesive extensions on either side the leg from the knee to the ankle and from them straps are attached to a spreader beyond the foot. The knee is then suspended in a sling and from this a cord runs up to an overhead pulley vertically over a point a few inches below the knee. From here the cord runs over a pulley on a bar at the end of the bed, then to a pulley on the spreader at the foot and back over a second pulley on the bar and from the cord is attached the proper weight which may be as much as eight pounds for an adult. Pillows are now placed under the thigh and leg so that the heel is just off the mattress and the thigh is kept from sagging at the point of fracture. You will see from the arrangement of pulleys that the

extension in the line of the leg is theoretically twice that of the lifting force. These conditions are of course somewhat modified by the friction of the pulleys and cord. Now the end of the bed is elevated so that the patient's weight gives counter traction. See diagram No. 1.

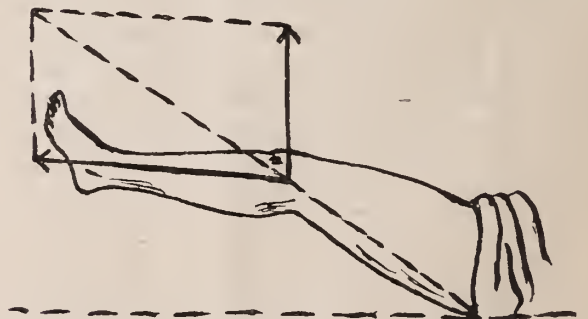


No. 1

Russell gives a diagram, using the lines of traction for two sides of a parallelogram and making the line along the lower leg twice that of the upright. We find that the resultant of forces on the diagonal of the parallelogram is in the line of the thigh. Improper angles of traction will result in a pull not in the line of the thigh and hence not



No. 2



No. 3

be efficient. Russell states that when the adjustments are correct the suspension sling will prevent eversion of the lower leg. However, we have



found in many of our cases that we needed some pull to keep the foot inverted. Most methods for treating this fracture emphasize abduction as necessary, as muscular pull abducts the upper fragment. Russell states that when the limb is put in a natural and comfortable position, the upper fragment will take this position. In practice, we have found if there was a fault in alignment it was more apt to be an inward bowing, the upper fragment being adducted. Naturally the action of gravity will tend to a backward bowing at the seat of fracture and this must be well supported by padding with soft pillow.

In assembling the apparatus, use a light and flexible cord. Not much strength is necessary for a weight of eight pounds and much stiffness and friction on the pulleys modifies the interrelation of the pulls. For a sling, a soft rough towel has usually been used, but this is bulky and awkward, is apt to crease and cut under the knee and has a tendency to slide down the leg. Recently we have been using white felt which fits smoothly on the skin and clings in place.

Suspended over the patient's head is the usual sling by which he can move himself about. Formerly we were taught that in treating fractures of the long bones we should immobilize the joint at either end of the bone. With this apparatus, we not only leave the adjacent joints free, but encourage the patient to move his body. What actually happens probably is that the movement in the hip joint compensates leaving the bone fragments quiet. However, the opinion is prevailing nowadays that the lack of absolute fixation may rather encourage than retard union. Certainly the absence of heavy coverings and constriction must be helpful to the vitality of the limb.

Patients find this apparatus very comfortable. Last fall I saw a husky adult within 24 hours of admission, lying on his side and reading. The nurses report that the patients do not complain and nursing is made much easier. A continual complaint of pain means poor reduction. The only patient we had who could not get comfort had an open reduction and we found muscle interposed between the fragments.

The apparatus is easily and quickly applied and a general anesthetic is not necessary. One house officer claimed he could put up a case in ten minutes. He probably didn't time himself, but it is quickly done.

Of course the cases need watching; the pillows get displaced, the knee sling slips down, the foot may evert, the patient moves up and down the bed so that the traction weight may rest on something or the angle of the overhead change. Measurements of the leg length should be made at least daily.

#### CONCLUSIONS

1. This method carries out the manœuvre by which in handling a broken thigh, we flex the knee, pulling it upward and slightly away from the body with one hand and with the other hand, make traction in the line of the lower leg. The resultant of these two pulls gives traction in the line of the thigh.

2. All the attachments are below the knee, the shortening pull on the lower fragment being practically all done by muscles attached to the tibia and fibula.

3. Through a cord running over four pulleys, one weight combines these tractions and comparatively small weights suffice.

4. The leg and thigh rest on soft pillows without constriction to the thigh, thus contributing to the comfort of the patient and the vitality of the tissues.

5. Alignment and length can be maintained, despite changes in position of the patient's body. Thus, he is allowed freedom of movement which promotes comfort.

6. The apparatus is simple and quickly applied, anesthesia not being necessary.

7. Nursing is easy with this system.

8. Most methods give good results with children. This seems ideal because of its simplicity, comfort and the ease with which the patient is handled.

9. In adults, this extension seems efficient and its many advantages warrant a continued trial.

---

#### LOW BACK PAIN\*

BY ROLAND HAMMOND, M.D.

PROVIDENCE, R. I.

It is a privilege to be asked by your President to address this Society and particularly upon such a common and yet little understood complaint. Backache is familiar to every practitioner and surgeon and is as common as indigestion or con-

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\*Read before the Kent County Medical Society, March 11, 1926.

stipation. In spite of a voluminous literature it remains in many cases an obscure and puzzling condition.

In considering low back pain it is first necessary to appreciate that in assuming the upright position man acquired several defects and weaknesses which did not trouble his quadrupedal ancestors. In man the viscera no longer hang at right angles to the vertebral column, but are suspended along side the spine. The anterior limbs do not serve as a support to the forward part of the vertebral column but hang from it and even require to be supported. In inspiration gravity assists rib movement in animals, while in man the ribs must be lifted against gravity. The lumbar lordosis of man is an acquired curve of the spine, since the backward curve of the dorsal spine is the only one present in animals. The most serious of these weaknesses is that found in the lumbo-sacral and sacro-iliac joints brought about by the upright position. These joints are held together only by ligaments and the natural roughness of their contiguous surfaces. There is no support of one bone upon another, as in the case of the knee or ankle, but the fifth lumbar vertebra may tend to slide forward from its resting place upon the upper surface of the sacrum. The movements of the lower back bring into play the largest and most powerful muscles in the body,—those of the back, shoulders, hips and thighs,—and consequently any pathological condition in the lower back is reflected over a large surface of the body.

The nerves involved in this area are among the largest in the body, and are subject to pressure from bone and soft parts as they emerge from the spinal canal and also in the pelvis.

Arthritis may involve the lower spine and pelvic joints and may occur as a part of a general arthritis or primarily in the spine. The symptoms accompanying this condition are often described as "lumbago." Movements of the spine are painful and the lumbar physiological curve may be flattened. Backache is also due to uterine, pelvic and abdominal causes or from metabolic or nervous disturbances, affecting the lower spine. The great majority of the cases with low back pain are due to sprains or injuries or to static deformities.

Traumatic backache involving the lower spine is usually due to sprain but occasionally may be caused by fracture of the transverse process of a

vertebra with localized pain and stiffness on the injured side. Severer injury may result in compression fractures of the body of a vertebra. Such injuries are easily diagnosed by an X-ray examination.

Sprains of the spine may be comparatively simple, involving a muscular strain, or if due to external violence a ligamentous strain or rupture may be produced. Both lesions are exceedingly painful and disabling. The muscle strain may be expected to recover more quickly than the ligamentous injury which often requires a prolonged period of treatment.

In both conditions the symptoms are similar,—there is stiffness in side-bending and hyperextension of the spine, pain on sneezing or coughing, in riding over rough roads or when subjected to a sudden jar. Pain may radiate down the buttocks, thighs, and even to the calves and toes, and is distributed along the nerve roots, rather than in the course of the peripheral nerves. Lateral deviation of the spine may be present. X-ray is rarely of help in these injuries.

In the case of muscular sprains the pain and tenderness are more superficial and passive movements may be performed with comparatively little discomfort, while active movements are exceedingly painful. The ligamentous injuries are deep-seated, and can be elicited by spinal movements and pressure of the finger. It may not appear until several days have elapsed and both active and passive motions are painful.

In treating injuries to the back, the first indication is rest during the acute stage. Recumbency may be necessary or in mild cases strapping the back with adhesive plaster may be sufficient. As soon as pain and spasm have subsided, use of the back should be encouraged, always protected by a support. A small narrow webbing belt should be fitted and this should always be buckled in the back and never in the front or on one side. In women it is convenient and useful to attach the belt to a well fitting straight front and laced back corset. On account of the angle made by the sacrum with the ilium at the sacro-iliac joints, pressure from the wings of the ilia must be made backwards and inwards in order to approximate the joint surfaces. A pad over the sacrum has no mechanical effect. In a certain proportion of cases this treatment may be sufficient, but in the severer cases with symptoms of nerve pressure,



physiotherapy by means of diathermy or deep therapy lamp and followed by massage or vibration are of distinct benefit. In order to prevent the formation of adhesions, graduated exercises and manipulations of the spine should be carried out at the same time.

When adhesions have formed they should be broken down by forcible manipulations of the spine, either with or without an anesthetic. A small class of these injuries will need to be relieved by the above measures, particularly if there is any lateral curvature of the spine. These cases should be put into a well fitting spica, carried below the knee and coming well up onto the lower ribs. After two to four weeks in bed the spica may be removed and a belt or back brace of steel and leather substituted and exercises and manipulations employed. An anesthetic may be necessary to overcome lateral deformity of the spine or where there is much flattening of the lumbar curve.

In all injuries to the back the intestines should be cleaned out and diet supervised.

The prognosis of simple back strain is as good as in other joints, unless the patient is poorly muscled and has a defective posture or if there is a pronounced neurotic element. It must be remembered also that an injury to the back is associated with serious symptoms, such as pain and stiffness, out of all proportion to the injury. This is probably due to the proximity of the spinal cord to the injured part, to the fact that it is almost impossible to obtain perfect fixation of this part of the body, and because every movement of the trunk, thorax, legs and arms is felt in the spinal and pelvic joints. These cases often present a strong psychological element.

Static deformities in which there is erroneous deflection of the body weight are fairly common, and are due to various causes. In some cases there is a deviation of the trunk laterally, resulting from a lateral curvature of the spine or a short leg. In other cases the deflection is in an antero-posterior direction. The abdomen may be large and protuberant, or round shoulders may be present. Mechanical defects in the feet, such as, flat feet and short posterior leg muscles, may result in pain in the lower back. In addition are a few cases in which we are unable to find a cause.

Static backache presents many symptoms of a varied nature. They are associated with standing,

walking, sitting and lying. Many women state that their backache has existed from childhood, growing more marked as they grow older. The pain is usually dull and grinding in character and apparently located at about the lumbo-sacral junction.

Many patients presenting these symptoms differ from the so-called normal type and may be divided into two well marked classes; (1) the slender, long waisted type and (2) the heavy, thickset and broad-backed type.

These patients should receive both general and local treatment. The general health should be brought up by hygiene, diet, outdoor life and suitable medication. Static errors should be corrected and some form of back support is usually necessary. In many cases foot errors should be corrected. Physiotherapy is particularly useful in this condition, and electric light baking and diathermy, massage or vibration and active gymnastic exercises are particularly helpful.

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## BOOK REVIEW

THE ORDEAL OF CIVILIZATION. *James Harvey Robinson*. Harper & Brothers, Publishers, 1926.

This book of 749 pages, for the most part history much condensed and selected to show its influence on the present, will prove perhaps too cultured for most of us. The last chapter, which considers "The Present Trend of Human Affairs," is exceptionally interesting, takes about five minutes to read, and will prove stimulating to anyone who deals with nervous and mental conditions. In it an excellent conception can be obtained of how the past makes the present, which is always a continuation of the past; of how by understanding the past we can understand ourselves, our emotions, our possibilities of achievement, our frustrations and perplexities, our scruples, obligations, conceits, prejudices, knowledge, and dexterities; of how all change in customs, individual or racial, is gradual; of how proximity accounts for much of our understanding of our fellows.

Our past, of course, exerts a tremendous influence upon our present; but I wish that the author had gone just a little farther and shown that, for all practical purposes, we ourselves determine whether the influence of the past shall be for good or for evil in our lives.

# THE RHODE ISLAND MEDICAL JOURNAL

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## RHODE ISLAND MEDICAL SOCIETY

Meets the first Thursday in September, December, March and June

H. G. PARTRIDGE	<i>President</i>	Providence
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ARTHUR H. HARRINGTON	<i>2nd " "</i>	Howard
JAMES W. LEECH	<i>Secretary</i>	Providence
J. E. MOWRY	<i>Treasurer</i>	Providence

### DISTRICT SOCIETIES

#### KENT

Meets the second Thursday in each month

FENWICK G. TAGGART	<i>President</i>	East Greenwich, R. I.
J. F. ARCHAMBAULT	<i>Secretary</i>	Arctic, R.I.

#### NEWPORT

Meets the third Thursday in each month

WILLIAM S. SHERMAN	<i>President</i>	Newport
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#### PAWTUCKET

Meets the third Thursday in each month excepting July and August

STEPHEN A. KENNEY	<i>President</i>	Central Falls
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#### PROVIDENCE

Meets the first Monday in each month excepting July, August and September

ROLAND HAMMOND	<i>President</i>	Providence
P. P. CHASE	<i>Secretary</i>	Providence

#### WASHINGTON

Meets the second Thursday in January, April, July and October

M. H. SCANLON	<i>President</i>	Westerly
WM. A. HILLARD	<i>Secretary</i>	Westerly

#### WOONSOCKET

Meets the second Thursday in each month excepting July and August

EDWARD L. MYERS	<i>President</i>	Woonsocket
WILLIAM A. KING	<i>Secretary</i>	Woonsocket

**R. I. Ophthalmological and Otological Society**—2d Thursday—October, December, February, April and Annual at call of President Dr. J. J. Gilbert President; Dr. M. J. O'Connor Secretary-Treasurer.

**The R. I. Medico-Legal Society**—Last Thursday—January, April, June and October. Dr. Creighton W. Skelton President; Dr. Jacob S. Kelley, Secretary-Treasurer.

## EDITORIALS

### RADIO ADVERTISING OF NOSTRUMS

As an advertising medium for all sorts of commodities, radio broadcasting, while still in its infancy, has much to recommend it. Some day when the glamor of the fine performance of the new "set" no longer has its appeal we shall show greater discrimination in regard to the jazz and jargon which we allow to wreck the quiet of our homes. Until that time arrives the advertiser of anything whatsoever is assured of an audience

and, like the magazines, the radio broadcasting concerns will derive their main support from the paid advertisements.

The manufacturers of nostrums have ever been willing to pay high prices, especially for space on the pages of supposedly reputable magazines. But the contributor of legitimate literature does not wish his articles to be seen in the same volume with notices which recommend worthless substances to gullible people. This is especially true of the authors of medical and other scientific articles, and in this country at least the appearance of an advertisement on the pages of any of



the better known medical or scientific publications is a practical guarantee of the honesty of its makers. But what of radio-advertising? The people of Providence at one time are being told simple medical facts by representatives of our State society, and the next day, and every day, are being urged to use "Salicon" as a sure cure for colds and other ills, or "Kaytonic," or whatnot other nostrum, for alleviation of various maladies real or imagined. The same radio station with laudable charity offers its services for the education of the public in matters of the preservation of health and then, with an eye on its bank account, sells the same privileges to be used for the purpose of possibly deluding and defrauding the same public by the unthinking recommendation of worthless nostrums. Can the public be counted upon to distinguish between the honest efforts in its behalf and the well disguised attempts upon its pocketbooks? Unfortunately it cannot. We may expect to hear people remark that the Rhode Island State Medical Society recommends both convalescent serum injections for the prevention of measles and "Salicon" for the prevention of colds, or antitoxin for the treatment of diphtheria and "Wellдона" for rheumatism. What can be done? The JOURNAL believes that as a protest which may carry weight in the eyes of some of the more well meaning and public spirited directors of radio-stations, medical and scientific societies should refuse to authorize their members to broadcast from stations whose programs are known to include such advertising of nostrums as would not be acceptable on the pages of reputable medical journals.

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### MEDICAL EDUCATION IN RHODE ISLAND

With the opening of the splendid new Lying-In Hospital, the medical profession in Rhode Island sees another link forged in the chain of medical preparedness which for long we have all been striving. At the dedication of the new Lying-In Hospital we had the pleasure of listening to Dr. Newell, who stated that the value of a hospital to the patient and as a community service was increased if the hospital could be an active teaching center. Often before in these pages the question of medical teaching has been brought up. An active

step has been taken during the past two years as a result of the courses offered to the medical profession in the various hospitals of the State. A question of a medical school in connection with Brown University has also been discussed, but should it end in discussion! Should not a committee be appointed from the Rhode Island Medical Society to co-operate with the proper officials of Brown University to study the whole matter and to see if a four years course in medicine in connection with Brown was logical and feasible. There is no question of the tremendous expense involved in such an undertaking, but has the State of Rhode Island the right to deny the splendid teaching experience offered in the hospitals of the State to prospective medical students and, especially, when we already have at Brown a premedical course of acknowledged high standing?

Let this question be viewed from every angle and let us appoint a committee whose advice we will be ready to accept after the situation has been adequately surveyed.

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### COMPARISON OF THE RESULTS OF VARIOUS TREATMENTS FOR ACUTE GONORRHEAL EPIDIDYMITIS\*

ERIC STONE, M.D.

FROM THE UROLOGICAL CLINIC OF THE PROVIDENCE CITY  
HOSPITAL

This report is a study of 161 consecutive cases of gonorrheal epididymitis coming under my observation in private practice and on the wards of the Providence City Hospital between January 1921 and January 1926.

Six types of treatment were employed, sometimes more than one on a given case, in event of the initial treatment's failure to give relief. One hundred and eighteen cases received only what is here designated as the "Expectant Treatment" as their only form of therapy. Seven were treated by diathermy. On 36, epididymotomies were performed. Six received intravenous injections of mercurrochrome, four sodium iodide, and four received intramuscular injections of Aolan (a boiled milk preparation). The last three types

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\*Read at the April meeting of the Providence Medical Association, 1926.

of therapy were used as an adjunct to the expectant treatment.

### *Expectant Treatment*

The expectant treatment consisted of rest in bed, support of the scrotum on an adhesive bridge across the thighs, 20% ichthyol ointment applied locally b.d., cessation of urethral treatments, alkalies by mouth, "Gonorrhea Diet," ice bag constantly to the affected side and other medication as the constitutional symptoms indicated.

Three bases for comparison of the effectiveness of the treatments have been selected, the first two because of importance to the patient and the last because of its medical significance. They are, the number of days to the relief of pain required after treatment had been started, the numbers of days the patient was confined in the house or hospital after initiation of treatment and the length of time after commencing treatment to the involution of the epididymus. This last needs some explanation. The epididymus was considered involuted if it had gone down to the size of an ordinary baked bean and was free of all tenderness.

As most of the hospital cases were discharged to their original source they could not in many cases be followed to the final outcome, so where percentages are given the numbers of cases observed at each period are given at the head of the column.

The figures for the expectant treatment are found in Table I.

TABLE I.

TIME TO RELIEF OF PAIN		TIME * INCAPACITATED		TIME TO INVOLUTION	
No. Cases	118	118		70	
Per Cent.	Days	Per Cent.	Days	Per Cent.	Days
8.0	1	8.1	4	5	7
1.5	2	2.1	5	5	10
18.0	3	6.3	6	5	11
16.0	4	5.4	7	5	12
11.5	5	3.6	8	5	14
2.5	6	5.4	9	15	18
2.5	7	16.3	10	15	21
3.4	8	18.1	14	15	28
5.4	9	11.8	18	15	32
		.7	21	15	48
		.1	24		
		.1	28		
		.1	35		

Eleven percent received so little relief that other types of treatment were employed, these cases are

further listed under the other type of treatment instituted.

In 10 cases or 9.9% there were recurrences of the epididymitis. One 10 days after discharge from the hospital, 5 occurred 14 days after discharge, 1 after 7 weeks, 1 after 10 weeks and one 3 months later.

### *Epididymotomy*

Of 36 cases operated 50% had no pain whatsoever after the multiple puncture of the epididymus. See Table II.

TABLE II.

TIME TO RELIEF OF PAIN		TIME INCAPACITATED		TIME TO INVOLUTION	
No. Cases	36	36		10	
Per Cent.	Days	Per Cent.	Days	Per Cent.	Days
50	Immediate	11.	2	20	7
12.5	$\frac{1}{2}$	13.9	5	20	14
10	1	8.3	6	10	18
2.5	4*	13.9	7	30	21
		11.	8	10	27
		11.	10		
		3.9	12		
		2.5*	21		

\*This case developed a hæmatoma in the wound.

Four cases or 11% recurred, one for only a day, and did not incapacitate the patient.

### *Mercurochrome*

Six patients received intravenous injections of 1% mercurochrome at 48 hour intervals, starting with 10 cc. for the first dose, 15 cc. for the second and if these were well tolerated 20 cc. thereafter. The urine was examined daily for albumen. Two cases showed it, one after the second injection and one after the third. With the appearance of albinuria the treatment was discontinued. See Table III for effects of the treatment.

TABLE III.

TIME TO RELIEF OF PAIN		TIME INCAPACITATED		TIME TO INVOLUTION	
No. Cases	66	66		1	
Per Cent.	Days	Per Cent.	Days	Per Cent.	Days
30	$\frac{1}{4}$	11	7	100	32
50	1	11	9		
11.5	2	39	12		
8.5	4	39	21		

In view of the interest in the reactions occurring under this form of therapy, they are recorded. One case had nausea or vomiting for an hour or

two after each injection. One developed a marked diarrhea after the first treatment, but none after the others. Two developed stomatitis, one after the second injection and the other after the third. Four showed temperature reactions after each treatment, ranging from 102 to 103, but in no case lasting more than 4 hours. Two had no constitutional reaction following the treatments, they were the cases least benefited by mercurrochrome.

#### *Sodium Iodide*

Four cases received, in addition to the expectant treatment, sodium iodide 25 gr. intravenously at 48 hour intervals. 25% (1 case) was relieved at the end of 48 hours, 25% not until the end of the fourth day, 25% on the eighth day and one case was still in pain at the end of the eighth day and called in another physician who did an epididymotomy. One patient was incapacitated 6 days, one 9 days and one case left the hospital against advice on the 18th day. The final outcome of the case which escaped from my care I do not know.

#### *Aolan*

The same number of cases received Aolan in conjunction with the expectant treatment. Ten cc. of the foreign protein was injected deep into the gluteal muscles every second day. Three cases or 75%, were relieved on the first day, and the fourth on the second day. One was discharged on the second day, one on the 6th day, one on the 8th, and the last on the 13th. In one the epididymus was down to almond size and non-tender on the 8th day, 2 or 50% by the 21st day and one by the 28th day. In one case there were two minor recurrences which did not require cessation of work.

#### *Diathermy*

Five cases were ambulatory, wearing a supporter during the day and applying support, ichthyol and ice at night. They all received daily exposures to the high frequency current through the Corbus Bipolar Scrotal Electrode running for half an hour at 600-800 milamperes. In one or 20% no relief was experienced from the first treatment and at the patient's request an epididymotomy was performed and the case is further recorded under that heading. In one case the pain was completely relieved on the first day, in one on the second, in one on the fourth and in one on the fifth day. In two the epididymus was considered normal at the end of the second week, in a

third at the end of the third week, (40 and 20% respectively). In one case the epididymitis recurred two weeks after the subsidence of pain.

#### *Comment*

Epididymotomy gave almost instant relief in 50% of the cases. In 97.5% the pain had disappeared in 24 hours, whereas expectant treatment gave relief to only 8% in 24 hours and 18% only were relieved by the 3rd day. Mercurrochrome gave relief to 33 1-3% within 6 hours, to 50% by the end of the 1st day and none had pain after the 4th day. Sodium Iodide gave results comparable only to the expectant treatment. Aolan gave relief to 75% by the 24th hour and to 100% by the 48th hour, in this respect comparable to mercurrochrome and without any of the ill effects of the latter drug. Diathermy failed in one case, but in 80% of the cases the patients were saved any incapacity. However it must be admitted that these were selected cases, seen within 12 hours of the onset of pain and swelling. They were also all in men of sedentary occupation.

Of those treated by expectant means alone 11% received no relief and other methods were resorted to. Of those receiving this conservative treatment throughout the course of their illness 21.9% were discharged from the hospital on or before the 7th day, and 65.3% on the 14th day or during the second week. Where epididymotomy was performed 49% were discharged by the 7th day and 99.7% were discharged on or before the 14th day. Where mercurrochrome was used, 11% were discharged on the 7th day, and 65.6% during the 2nd week, figures closely resembling those for expectant treatment alone. All cases receiving Aolan were discharged by the 14th day and 75% by the 7th day.

As to sodium iodide the figures correspond to those for the expectant treatment alone. Diathermy gave no relief to one case or 20%, but 80% were not incapacitated at all.

Of those observed throughout the illness return to normal occurred among those receiving expectant treatment in one week in 5%, in two weeks in 20%, in three weeks in 35%, and by the end of the fourth week in the remaining 40%. Where surgery was done the figures are respectively 20%, 30%, 30% and 20%. Only one case in which mercurrochrome was used could be followed until cured, involution was down to our arbitrary normal by the 32nd day. In none of those receiving



sodium iodide was involution complete by the third week, after which time they no longer came for observation or treatment. Recovery took place in 25% of the patients receiving Aolan by the end of the 1st week, 50% by the end of the 3rd week and 25% by the end of the 4th week. Where diathermy was employed 40% were cured by the fourteenth day, 20% by the 42nd day. One case failed and in one a recurrence treated by expectant means obscured the results of diathermy alone.

Recurrences took place in 9.9% of those receiving expectant treatment, in 11.1% of those whose epididymus was opened, none among the 6 receiving mercurrochrome, none among those receiving sodium iodide, in 25% of those receiving Aolan and in 20% of those treated by electricity.

### *Conclusions*

It may be stated dogmatically that:

1. Expectant treatment alone is not sufficient.
2. Epididymotomy gives—
  - a. Immediate relief of pain in a vast majority.
  - b. Shortens hospitalization by half as compared with expectant treatment.
  - c. Shortens the period to normality by half.
  - d. Has a percent of recurrence well within the co-efficient of statistical error as compared with expectant treatment.

It may be stated tentatively that:

1. Mercurrochrome stands next to epididymotomy in relieving pain, shortens the time to cure, but does not shorten the hospital period. In most cases it has annoying secondary effects.
2. Sodium Iodide is of no benefit.
3. Aolan does not relieve pain as rapidly as either epididymotomy or mercurrochrome, but it does shorten the period of hospitalization to even as great an extent as epididymotomy.
4. In selected cases diathermy may obviate any incapacitation.
5. When a patient presents himself with this condition, if it is an early case and the patient's occupation is sedentary diathermy is a permissible method of attack. If the condition is advanced and the patient's work physically violent it may be wise to offer—
  - a. Epididymotomy if social conditions demand early return to work.

- b. Aolan in conjunction with expectant treatment if the pain is moderate and earliest possible return to work is not imperative.

A note on the occurrence of epididymitis may be of interest. In private practice it appeared in 32 or 4.6% of 700 consecutive cases of acute or chronic gonorrhea.

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## SOCIETIES

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### RHODE ISLAND MEDICAL SOCIETY

HOUSE OF DELEGATES  
SPECIAL MEETING, JAN. 7, 1927

A special meeting of the House of Delegates was held this day at 5 P. M. at the Medical Library, the President, Dr. H. G. Partridge, presiding.

Dr. Partridge reported on the activities of the New England Medical Council recently formed and stated that delegates from the Rhode Island Medical Society were desired. It was moved and seconded that the President and the Secretary be members of the New England Medical Council ex-officio and that the President be empowered to appoint the remaining three delegates. It was so voted and the President appointed:

L. C. Kingman, M.D.  
F. N. Brown, M.D.  
F. T. Fulton, M.D.

as the other delegates to the Council.

It was moved and seconded that the expenses of the delegates be paid by the Rhode Island Medical Society. It was so voted and the motion referred to the Council for action.

The matter of immediate medical relief in disaster as proposed by the American Medical Association was considered under deferred business. The Secretary read a communication from the Providence Chapter of the American Red Cross which showed that plans for medical relief in disaster are well organized for Providence but giving no information in regard to the other sections of the State. It was voted that the President be empowered to delegate the duties of the State Director of the Medical Relief in Disaster to the



Director of the Medical Relief of the Providence Chapter of the American Red Cross.

Adjourned.

J. W. LEECH, *Secretary*

#### PROVIDENCE MEDICAL ASSOCIATION

The regular monthly meeting of the Providence Medical Association was called to order by the Vice President, Dr. Henry J. Hoye, Monday evening, November 1, 1926, at 9 o'clock.

The records of the last meeting were read and approved.

Dr. Jameson reported a case and demonstrated the gall bladder removed by Dr. A. T. Jones.

Dr. John I. Pinckney of the Providence Tuberculosis League gave a Preliminary Report of a General Survey of the Primary Public Schools of Providence.

Out of over 15,000 children some few hundred children were found under weight and these cases were divided into reactors and non-reactors to skin tests. He could not find definite difference between these two groups in regard to appetite, spirits, efficiency in school work or physical examination.

This was a preliminary report of extensive work.

The discussion was opened by Dr. Gerber and continued by Drs. Perkins, Buffum and Pinckney.

The second paper was by Dr. Philip Batchelder on Uses and Limitations of X-Ray in Examination of the Head. He took up in detail most of the problems met with and showed a number of interesting slides. The discussion was opened by Dr. James F. Boyd and continued by Drs. Gerber, McDonald, Donnelly, L. B. Porter, Adams, Kelly, Gerber and Batchelder.

The meeting adjourned at 10:40 P. M. Attendance 67. Collation was served.

Respectfully submitted

PETER PINEO CHASE  
*Secretary*

The regular monthly meeting of the Providence Medical Association was called to order by the President, Dr. Roland Hammond, Monday, December 6, 1926, at 8:50 P. M.

The records of the last meeting were read and approved.

The Standing Committee having approved their applications the following were elected to membership: Lucy E. Bourn, Anthony M. Feifer, Anthony Romano.

The first paper of the evening was read by Dr. William A. Horan on Astragalectomy and Backward Displacement of the Foot.

He spoke shortly of the history up to the time when Whitman devised the operation which is now recognized as the approved method of stabilizing the foot in cases of flail foot and certain types of paralyses. He gave the indications, a short description of the technique and an excellent moving picture demonstration of the operation. Then he showed some interesting cases to illustrate the results.

The paper was discussed by Dr. Roland Hammond.

The second paper was by Dr. Morein on Diagnosis of Gall Bladder Disease. This can often be made on the history alone of indigestion in its many manifestations, biliary colic and jaundice. Physical examination is usually not very important, biliary drainage is generally not much esteemed, laboratory tests and liver function may help but the X-ray examination is worth all the others. This may show:

1. Failure to produce a shadow.
2. The negative shadow of gall stones.
3. Failure normally to expell the contents and
4. Distortion of shape of the bladder.

He showed some interesting films illustrating these points. The paper was discussed by Drs. C. O. Cooke, A. M. Burgess and I. Gerber.

The meeting adjourned at 11 P. M. Attendance 49. Collation was served.

Respectfully submitted

PETER PINEO CHASE  
*Secretary*

The annual meeting of the Providence Medical Association was called to order by the President, Dr. Ronald Hammond, Monday evening, January 3, 1927, at 8:50 P. M.

The records of the last meeting were read and approved.

The reports of the Secretary, Treasurer, Standing Committee, Reading Room Committee, Milk Commission of the P.M.A. were read.

## REPORT OF THE SECRETARY

The Providence Medical Association held nine meetings during the year 1926 with a total attendance of 591, which is eight less than last year and 75 less than the year before.

The total active membership Dec. 31, 1926, was 372.

For the four years before we entered the war the average total membership was 283 and the average total attendance was 698; that is, with about a third larger membership than we had then we have about a seventh smaller attendance. Six hundred forty-nine, the smallest attendance in any of those four years, has been exceeded only twice in the eight years since the war. It is evident that attendance on medical meetings is on the wane in this community. Two men were dropped for non-payment of dues.

During the year the Association lost by death, George L. Collins, Frederick G. Phillips, George T. Spicer and Frank L. Day.

Nineteen applicants were elected to active membership.

Sixteen papers were read by members and four by guests and these papers were discussed by 83 members and guests. A striking feature of the meetings this year was the large number taking part in discussions; nearly half as many again as last year with the same number of papers. There were two case reports by members.

### REPORT OF READING-ROOM COMMITTEE, 1926

Journals subscribed for by Providence Medical Association:

American Journal Obstetrics and Gynecology  
American Journal Roentgenology  
American Journal Syphilis  
Archives of Dermatology and Syphilology  
Archives of Pediatrics  
Archives of Neurology and Psychiatry  
Archives of Otolaryngology  
Archives of Surgery  
Brain  
British Journal of Children's Diseases  
British Journal Tuberculosis  
British Medical Journal  
Heart

Journal of Bone and Joint Surgery  
Journal of Experimental Medicine  
Journal of Industrial Hygiene  
Lancet  
Medical Journal and Record  
Military Surgeon  
Modern Hospital  
Psychological Clinic  
Quarterly Cumulative Index  
Surgery, Gynecology and Obstetrics  
Surgical Clinics of North America

### FIRST ANNUAL REPORT OF MILK COM- MISSION OF THE PROVIDENCE MEDICAL ASSOCIATION

The Milk Commission of the Providence Medical Association was appointed in December, 1925. The Commission belongs to the American Association of Medical Milk Commissions and has adopted the methods and standards established by that organization.

Through the co-operation of the Medical Milk Commissions of Boston and Worcester we have accepted the certification of the following farms:

1. Bonnie Brook Farm—H. P. Hood & Sons.
2. Walker-Gordon Laboratory Co.
3. Alta Crest Farms of Spencer, Mass.

During the past six months from June to November inclusive, we have supervised the sale of 30,000 quarts of certified milk in Providence. Weekly bacteriological and chemical examinations are made in the laboratories of Brown University under the supervision of Professor Gorham.

The results of these analyses are as follows:

	Alta Crest	Hood	Walker- Gordon
General average bacteria.....	3572	2202	3607
General average fat.....	4.13	4.49	3.91
General average total solids..	13.14	13.78	12.95
Highest bacteria count.....	8750	5000	9400
Lowest bacteria count.....	1700	450	650

The members of this Commission are as follows:

William P. Buffum, M.D., *Chairman*  
Maurice Adelman, M.D.  
William H. Jordan, M.D.  
A. Roland Newsam, M.D.  
Reuben C. Bates, M. D.,  
*Secretary and Treasurer*

Dr. J. M. Peters announced the meeting to present Dr. Chapin's portrait to the State Society. Dr. Roland Hammond read the President's Annual Address, which sought to contemplate the possible future of this Association. Although we are in a thriving condition we are not abreast with public health and welfare work. No longer can we hold a passive position in public affairs or paternalism and state medicine will overwhelm us. We must keep in closer contact with the patient and family and thorough scientific training must be supplemented by instruction from practicing doctors.

Government control of medicine will probably increase but there will always be those who will insist on personal choice of physicians. Already there are too many free clinics and the professionalizing of social service leads to the abuse of this by those anxious to show results. Organization is conflicting and duplicating. Their resources should be pooled. And medical societies should supervise and regulate the proper distribution of this work.

The officers and committees for the ensuing year so nominated by the Standing Committee were unanimously elected.

In accordance with Article I, Section 6, of the By-Laws, the Standing Committee made the following nominations for officers and committees for the year 1927:

For President, Henry J. Hoye, M.D.

For Vice-President, Edward S. Brackett, M.D.

For Secretary, Peter Pineo Chase, M.D.

For Treasurer, Charles F. Deacon, M.D.

For Member of the Standing Committee for five years: Roland Hammond, M.D.

For Trustee of the Rhode Island Medical Library for one year: Frank T. Fulton, M.D.

For Reading Room Committee: George S. Mathews, M.D., Elihu Wing, M.D., Guy W. Wells, M.D.

For Delegates to the House of Delegates of the Rhode Island Medical Society: W. F. Flanagan, M.D., M. B. Milan, M.D., H. B. Sanborn, M.D., L. C. Kingman, M.D., E. S. Cameron, M.D., W. H. Higgins, M.D., A. J. McLoughlin, M.D., P. P. Chase, M.D., F. E. McEvoy, M.D., A. Corvese, M.D., M. Adelman, M.D., P. C. Cook, M.D., C. W. Skelton, M.D., R. S. Wilcox, M.D., J. W. Sweeney, M.D., P. Appleton, M.D., W. Pickles, M.D.

For Councillor for two years: D. L. Richardson, M.D.

Dr. Henry J. Hoye, the President-elect, was escorted to the chair by Drs. Doten and Gibson. After a few remarks, he announced that he would appoint committees later.

After some adverse remarks from Dr. Kelly it was voted to give \$175.00 to the R. I. Medical Society Library for the purchase of journals, \$250.00 for binding journals and \$450.00 donated to the R. I. Medical Society for any purpose desired. The annual dues were made \$5.00.

The meeting adjourned at 9.30 P. M.

Attendance 47. Collation was served.

PETER PINEO CHASE

*Secretary*

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#### PAWTUCKET MEDICAL ASSOCIATION

The regular monthly meeting of the Pawtucket Medical Association was held at the "Jack-O-Lantern," 33 Summer Street, Pawtucket on December 16, 1926.

A very instructive talk as given by Dr. C. H. Jameson of Providence.

Subject: Presenting Symptoms in Urology.

Collation was served.

LESTER J. GILROY

*Secretary*

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## ANNOUNCEMENT

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### SUPREME COURT UPHOLDS AMERICAN DRUGS

A decision of the highest importance to every physician, pharmacist, drug manufacturer and, in fact, every user of drugs in the United States was rendered by the Supreme Court of the United States on October 11, 1926, when this highest tribunal of the nation declared that the Chemical Foundation has been acting legally and properly in the purchase of the foreign drug and chemical patents, during the war, and licensing American manufacturers to produce these essential substances in this country.

The sale of the German patents to the Chemical Foundation took place during President Wilson's administration and had, without doubt, a distinct influence upon the outcome of the war, be-



cause this transfer permitted American concerns to begin at once the production of various drugs and chemicals which had, theretofore, been made only in Germany, and whose importation ceased with our entry into the war.

The next administration, apparently under some misapprehension as to the purposes and functions of the Chemical Foundation, directed that suit be brought by the government to set aside the sale of these patents to the Foundation.

The case was first tried in the Federal District Court of Wilmington, Del., and resulted, after weeks of evidence taking, in a finding against the government on all points.

The case was appealed to the Circuit Court, which upheld the decision of the District Court in every particular.

A final appeal carried the question to the Supreme Court of the United States, where evidence was heard more than a year ago. The long delay in rendering a decision has afforded time for mature consideration. The court has decided unanimously that the sale to the Chemical Foundation was valid and legal and that the Foundation has made no improper use of the powers which it thus acquired.

This decision is a momentous one for everyone who has anything to do with drugs and chemicals in any way whatever.

To the physician it means that he will have a steady and regular supply of reliable drugs, of American manufacturers, which can never again be upset or cut off by the vicissitudes of war. The same considerations apply to the pharmacists. Among the vitally necessary drugs affected may be mentioned the arsphenamines, cinchophen, barbitol, the flavines, procaine and a host of others.

To the drug manufacturer, who has invested thousands of dollars in apparatus for the manufacture of drugs and chemicals under the Foundation's licenses, it means relief from a certain degree of anxiety (though the outcome of the case could scarcely have been in doubt) and a tremendous inspiration to further investigations looking to the production of more and better drugs and chemicals for America.

To the nation at large, it means that reliable medicines will continue to be sold at reasonable prices; and, more or less indirectly, that the dye industry of America, which is now in a flourishing condition, thanks to the Chemical Foundation, will

be available for government uses should we become involved in another war.

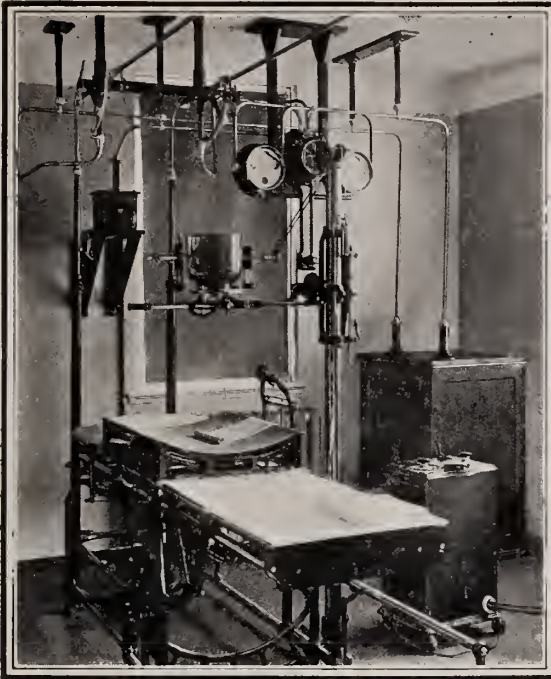
Nor are medicine and pharmacy the only lines of endeavor affected by this momentous decision. The steel and packing industry and many others will be vastly benefited by the freedom of chemical investigation and activity which is now assured them.

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## MISCELLANEOUS

### REMOVING SPLINTS AND BRACES FROM PATIENT

The literature is full of directions as to how and when to put the appliance on the patient. It is practically silent about removing it, and yet it requires good judgment to know when to divorce the patient from his splint, be it made of plaster, wood, leather or steel. Emil S. Geist, Minneapolis (*Journal A. M. A.*, August 14, 1926), pleads that authors of future textbooks on orthopedic surgery give more attention to the duration of disease and injury, especially as it affects the discontinuance of apparatus. He gives a table compiled by Dr. F. E. Clough of Lead, S. D., which is accurate and definite. It shows the number of days lost from work because of different kinds of fractures. Geist's rule for removing splints is simple: The use of a cast, brace or other appliance should not be discontinued abruptly; the patient should first be allowed to go without his apparatus for one hour daily for a week. The time should then be increased by making it two hours for the second week, three hours for the third week and so on. Frequently the process should be slowed down so that the gradual and definite removal of the appliance occupies a few months. This "hourly" method has several advantages: The patient does not feel that treatment is concluded as he is apt to if the brace is abruptly removed; he reports to the surgeon at stated intervals, at which times untoward symptoms of recurrence or relapse can be recognized. This method has proved especially valuable in those cases in which the discontinuance of the brace throws stress and strain on muscular groups that the physician is trying to "build up," as in infantile paralysis, weak-foot and scoliosis.



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# THE RHODE ISLAND MEDICAL JOURNAL



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PROVIDENCE, R. I., MARCH, 1927

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SINGLE COPY 25 CENTS

*As dean of public health officers and by virtue of his own qualifications  
and fitness The Rhode Island Medical Journal honors*

**CHARLES V. CHAPIN, M.D., Sc.D.**

*as easily the first in all the world*

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## ORIGINAL ARTICLE

### TESTIMONIAL EXERCISES

BY THE

RHODE ISLAND MEDICAL SOCIETY

In Honor of

CHARLES V. CHAPIN, M.D., Sc.D.

AT THE UNVEILING OF HIS PORTRAIT

*Held in the*

MEDICAL LIBRARY BUILDING

JANUARY 17TH, 1927

### ADDRESS

BY

GEORGE E. VINCENT, Ph.D., LL.D.

*President of the Rockefeller Foundation*

DR. PARTRIDGE: Will the meeting come to order?

Fellows of the Rhode Island Medical Society and Guests: We are very glad to welcome you here tonight. It is a very momentous occasion. For the first time, so far as I know, in the history of the Society we have met to do honor to one of our Fellows. Last June the Society determined to give some evidence of its appreciation of our fellow doctor, Charles V. Chapin, and it was decided to present to the Medical Library a portrait of him. That portrait will be unveiled tonight. We are all very proud of Dr. Chapin. For a great many years he has gone up and down among us, helping us here in the medical profession in Rhode Island as well as in other countries, in fact, all over the civilized world.

Dr. John M. Peters, Chairman of the Committee, is to unveil the portrait.

DR. PETERS: At the annual meeting of the Rhode Island Medical Society held last June, a committee was appointed to have a portrait painted of Dr. Charles V. Chapin to be hung later in the Medical Library Building.

This committee is now making its report. Its first delicate task was to persuade Dr. Chapin to have his portrait painted and its second duty to select the painter.

Mr. William C. Loring, with the backing of and in the presence of Mrs. Chapin, has completed his work to the satisfaction of Dr. Chapin, of his family, of the committee, and we trust and feel sure of that of the members of the society.

In doing honor to Dr. Chapin, whom we all admire and respect as a colleague, we are also bringing honor to our Medical Society, to the City of Providence and to the State of Rhode Island.

Others will tell you in what esteem he is held in medical and especially in Health Department circles, but to us, his neighbors, who know him personally, who respect his modesty, who appreciate him as a friend, who recognize his achievements in scientific medicine, who know the courage it took to change radically the care of patients suffering with contagious diseases by showing that these diseases were spread by contact and not by the air—who had the initiative and courage to build the Providence City Hospital, in which these theories could be demonstrated.

To us—it is a particular pleasure to be able to honor him in person and in the presence of his loyal wife and son.

(Unveils the Portrait)

DR. PARTRIDGE: In behalf of the Society I accept this portrait, which will hang on our walls so long as the building endures. And now I call upon Dr. G. Alder Blumer to act as master of ceremonies for the rest of the evening.

DR. BLUMER: Mr. President, Chairman of the Portrait Committee, Fellows of the Rhode Island Medical Society, Ladies and Gentlemen: It is at once an honor and very embarrassing to have turned over to me at this stage the duty of conducting these auspicious exercises, in co-operation with the President, on behalf of the Rhode Island Medical Society, in tribute to the great sanitarian whose portrait has just been unveiled, and the anniversary of whose birth falls in happy coinci-



dence on this day. The honor will be a grateful memory for the remainder of my life, and as for the embarrassment, fortunately that will soon be over. For, as I interpret instructions, I am to bear in mind the scriptural injunction, "God is in heaven and thou upon earth; therefore let thy words be few." There are, indeed, but two real and authorized speakers this evening to claim your attention; and yet, before introducing the first of them, I may at least permit myself enough latitude to comment with utmost brevity upon the portrait which has just been exposed to view. It is related that when a monument to the great liberator, Daniel O'Connell, had been erected in Dublin, the City Fathers offered a prize to him who should conceive the most appropriate inscription. The Irish being a race gifted in speech, of course there were many competitors to scribble and scramble for the reward, but the winner was he who suggested the single word "O'Connell." So we who are assembled here this evening might well exclaim with one voice "Chapin," also a liberator and a great one, as we look upon the familiar features which Mr. Loring has so skilfully portrayed. It may be said that the artist has been faithful to the guiding principle of his art everywhere, namely, "Paint to the life, let the warts fall where they may." Here, however, there are no warts, actual or metaphorical, and the artist has produced a lifelike portrait, full of character and full of charm, which the Society may well be proud to hang upon its walls as the counterfeit presentment of one of its most distinguished fellows. And there it will hang for future generations of physicians to behold—and in this one phrase you must permit me, in the voice of another, to be really oratorical—"when you and I, like streaks of morning cloud, shall have melted away into the infinite azure of the past."

Dr. Chapin being a prophet not without honor in his own country, it seemed wise to the Portrait Committee that a fellow prophet from New York, and no minor one, should be selected for this celebration to sing his praises and to expatiate upon the moral of his eventful career as a public health officer. Naturally, the Committee had in mind a busy man and one of nation-wide reputation, and we trembled greatly lest it should be impossible for him to accept the diffident though urgent invitation of the Committee; but friendship and esteem go a long way towards self-sacrifice, and our eulogist

is here on this platform, fortunately, having just arrived in Providence, and he will hie him back to New York after this meeting by the night train.

Ladies and Gentlemen, I have the honor of presenting as the orator of the evening, Dr. George E. Vincent, humanist, sociologist, publicist, lecturer, educator, editor, philanthropist, philosopher, all rolled into one well-rounded whole. Our speaker has a rare equipment for the task which he has so generously consented to perform. For does he not realize in his many-sided fitness—and I hope he will pardon me for making this claim in his presence—does he not realize, I say, the ideal of Milton, who about three hundred years ago said this: "I call, therefore, a complete and generous education that which fits a man to perform justly, skilfully and magnanimously all the offices, both private and public, of peace and war."

The President of the Rockefeller Foundation, a friend of and to Dr. Chapin, will now address this expectant gathering.

DR. VINCENT: Dr. Blumer, Ladies and Gentlemen: A Scotch minister was praying for rain, and while he prayed the heavens opened and the floods descended, and he modified his prayer and said, "Oh, Lord, when we prayed for rain we expected a wee gentle shower, but this is perfectly ridiculous."

As a representative of an organization which is engaged in the work of promoting the cause of public health in many countries of the world, I count it a real pleasure to come here tonight to participate in these exercises for the honor that is being done to a man who not only by seniority is the dean of public health officers in the United States, but, by virtue of his own qualifications and fitness, is recognized as easily the first in all the world. It is a peculiar satisfaction to talk about a man while he is still alive, and very much alive. This retrospective talk of what a man has accomplished presumably at a very remote time, this wave of holding exercises to some historical character, makes no appeal to me. I have come to talk about a man who has not only done things in the past but who is today in the very van of public health progress, and a man who looks backward only because it gives him clearer vision of the future. Statistically he seems to be seventy-one years old, but you know what statistics are, and through some statistical error he seems to us to be

seventy-one years young. I want to talk about Dr. Chapin in a way that will not make an undue attack upon his characteristic modesty, because I have a certain amount of sympathy for him, and I am sure you share in this. Consider the circumstances. A man who has lived a comparatively calm and modest, quiet and retiring life, and suddenly his fellow-citizens pounce upon him and inflict upon him eulogies and portraits, and all the other things which you can imagine are a source of the greatest embarrassment to a genuinely modest man. So let us be as considerate about it as we can, and rather than contributing our praises and encomiums in sudden bucketsful, let us distribute it over a little period of time to make him feel more comfortable, and give him what he is able to endure. Let us put Dr. Chapin in the van in his relationship to the development of the public health movement during the last fifty years, which has been going on at a very rapid rate but advancing by certain stages. First concentrating on the sanitation of the environment. Everybody was mad about that, and some communities have never known anything has happened since. They considered this sanitary engineering wall that was essential to the development of public health and hygiene, but some communities have gone on to the second stage, the stage of the control of communicable diseases. It is a most fascinating stage. Great things have been accomplished in the interest of public health; many other things remain to be accomplished. It has finally dawned upon people that, having done everything reasonable in the line of sanitary environment, and after having brought communicable diseases under reasonable control, that probably the death rate depends upon individual responsibility somewhat, and upon how people behave themselves. And now we have come to the new epoch of mental hygiene. There have been so many varieties of hygiene. There was personal hygiene, there was pre-natal hygiene, internal hygiene, infant hygiene and pre-school hygiene. We forgot at one period and went back to pre-natal and social hygiene and industrial hygiene, and now mental hygiene. This is the most interesting and fascinating subject of them all. This field is still so new and undetermined as to enable us to hold autocratic opinions concerning it, which is a great convenience. It gives us more or less standing in conversation. This development of public

health work through its different stages has been a very interesting growth, very interesting evolution. Don't misunderstand me. I don't mean all at once. It has been an historical development. Some communities have studied this problem, and others have fostered another. Some have gone in very strong for mother and child. They make a most effective appeal. When they first discovered mother and child in Washington, they established bureaus which have vied with each other for protection of mother and child. It has become a delicate and peculiar kind of vogue, and the tearful solicitude of congressmen for mother and child is most touching. Some communities go in for the most careful infant hygiene, asking loudly for a purer water supply or milk supply, and all these aids underlie the progress of sanitation and control of communicable diseases, and preoccupation with one element would mean living upon a very low level, but the development of sound public health progress is one in which these different stages are represented in a well-rounded and symmetrical whole. In the leadership with respect to this movement Dr. Chapin has played an important part. He has played a most important part in every one of the fundamental features. He has done a little more here and there, but keep in mind that his interest has been a wide interest, and an interest that has seen the movement as a whole. It has not been confined to a narrow conception of one particular field, but his most important contribution has been the distinction between the essential sanitation which protects health and the sanitation and the control of nuisances which belongs to the police department and the plumber's supervision. One of the greatest dangers that the public once concerned itself with was something which had no bearing upon it. That was when we thought diseases were communicated by gases, by sewer gas. Some of us are old enough to remember when sewer gas was accepted as one of the greatest enemies to mankind. Dr. Chapin was most disappointing about that. He has annoyed a lot of people. He has pointed out that while sewer gas might not be an adequate substitute for perfumery, yet, so far as being a menace to human life, there is nothing to it. And he destroyed garbage collection as a real pleasure for those in public health work, showing that preoccupation with the disposal of rubbish might become a handicap



to genuine sanitation. And he has made a fatal attack upon "clean-up week." What a disturbing person he is. Doing things by the week is a great American habit. It is only the decayed nations who do things systematically, while we systematically sweep under the bed until there is no more room, and then we have a grand clean-up week. Could anything be more revolting? We let things run until they are unendurable, and then reform things all at once. We take care of our roads in the same way. We do nothing until they are impassable, and then a new street is laid. Now we have gone in for paving and have adopted the European way of maintaining pavements after they are laid.

In public health work, Dr. Chapin has stood for proper sanitation in all lines, and he has made a direct contribution to public health by giving importance to those things which are important and leaving those which are of minor consideration and have little influence upon it, such as "clean-up week," which should not be looked upon as a public health procedure but merely a form of booster orgy, and we owe it to Dr. Chapin, who is pointing it out in a definite, concrete and fearless fashion. Then that which comes within the realm of communicable diseases; of course, there you find Dr. Chapin on his own ground. That is a field which he has made peculiarly his own. His studies, his books, his investigation and his writings have all tended to show that the one great and important factor in communicable diseases is communication from person to person. And a lot of other things about which people were so concerned are relatively unimportant, some of them completely negligible. And he has laid his hand upon the very ark of the covenant, one of the most sacred traditions until he destroyed its value, which is fumigation. In Latin countries you will find fumigating apparatus which compares favorably with our fire apparatus. They take lots of pride in it, as we do in our fire apparatus. That is one of the most delightful things. It is a remarkable admission that we have only lately found a way to build buildings that won't burn, and it is a disgrace instead of a matter for civic pride. And people who set their hearts upon producing the most disagreeable form of disinfectant are now discouraged and disgusted when back in 1905 Dr. Chapin wrote a book about the uselessness of the great

detail of what is called terminal fumigation, doing the whole thing thoroughly when the disease was all over, and in 1912 he stopped doing it in Providence. And see what happened to you! The American Medical Association passed a resolution—you know they don't often do that—they passed a resolution in which they viewed with alarm the consequences of this proposed abolition, and yet it has been pursued until almost all, and certainly all of the enlightened cities of the United States, have given up the use of terminal fumigation. I was interested in reading that in one of the recent sessions of the Health Section of the League of Nations this subject came up, and after a good deal of talk the preponderance of judgment was strongly against a continuance of the old practice, so that in due time in South America and other remote countries of the world they will be giving this thing up. When the apparatus wears out it will be difficult to get appropriations for a new one.

To the control of communicable diseases Dr. Chapin has contributed in all kinds of ways. He has helped to establish a hospital here for contagious diseases. I suppose Dr. Richardson has had a lot to do about it, but especially it is a hospital on these enlightened principles for which Dr. Chapin is responsible, and for the establishment of hospitals for contagious diseases all over the United States, and which has persisted and is being copied in European countries, a hospital which is administered on the basis of this idea, that disease is communicated from person to person. And a word as to what used to be regarded as precaution—you know what used to be done with pest houses. In my respectable community where I live, in Connecticut, it is about two miles from the hospital to the city, and there is maintained a hospital for communicable diseases. The plan was to have a contagious ward as part of the hospital, so that some of the great expense would be equalized. But would the enterprising citizens of my village stand for it? No. We have the old town-meeting government, and all the citizens appeared and got up and asked, "Shall a pest house be put at our very doors?" It is a long way to come to the stage at which you have arrived in Providence. A very important contribution was that one from which there have been good results in Providence. In 1920, Dr. Chapin made the



statement that vaccination of school children in Providence was so thorough that in fifty years only one school child has had small pox, and that turned out to be a child overlooked in vaccination. What a record! How could you possibly have done it? Have you no sense of freedom? Do you propose to have this terrible stuff injected into your children? Have you no way of opposing yourselves against this very objectionable proposition? I don't understand it. You must be a downtrodden people, or is Dr. Chapin so persuasive and so reasonable and convincing that you actually think security lies in that direction? I like to think that that last hypothesis is possible. This work in contagious diseases in this stage, and the development of control of communicable diseases, is a very important thing, not only for this community but in lands beyond the sea and other countries.

And the third stage—you will probably say that a man at his age—after all, when you get to be sixty-five to seventy, you are getting on, and you say, "Now, isn't it very likely that Dr. Chapin will begin to think that communicable diseases are most important, and be a little apathetic about all the hygienes and the like?" But that is just the thing about Dr. Chapin—he goes on being young. He is not running true to form. He is interested in new problems and participates against these dangers and unfortunate movements in the wrong direction. You will find him, when you study his work and read his books and his articles, advocating this new movement for hygiene, you will find him setting the pace and saying that the physician and the nurse are taking the place of the sanitary inspector and the policeman. You couldn't put it better than that. You cannot coerce people from outside, and if you do anything about personal hygiene you must get them interested from the inside. That means a new point of view in this public work. In this field of hygiene to which the world is now lending its attention you will find Dr. Chapin taking an active part, taking up those measures which enlighten, and giving wide circulation to this public health work. How are these things brought about, this development? They have been brought about by definite things, and I call your attention to eight of those things. I used to be a college professor, and it is almost impossible to get away from the systematic habit. Don't be alarmed. The

points can be made with reasonable brevity. This public health work has been brought about first of all by research. By fundamental research he has gained knowledge, and the knowledge which has been put into practically all public health work is quite obviously the first essential. You will say that Dr. Chapin is not a research man—you might say he was not. He was a teacher for ten years in Brown University but that might not make him a research man necessarily. He perhaps has not been a research man in the narrow sense of being confined to the laboratory, but I think that research is the putting of a true scientific spirit into the investigation of the problems with which one deals. Certainly one of the great outstanding characteristics of Dr. Chapin is his essentially scientific point of view. This scientific point of view is very annoying to the layman. He likes generalities, very quickly arrived at. He doesn't like qualifying statements. I have come to the conclusion that Henry James in his later style, which has become so involved, was merely trying to tell the truth. If you have ever tried to speak the truth—it is an adventure with most people—you will discover that you will make a general statement, then you will look it over and say, "No, that needs a little qualification." You qualify it, and then you will say, "It needn't be qualified to quite that extent." You undertake therefore to put in a clause qualifying the first qualification, and then you say, "I have a little overdone that," and you take something away. Now if you do that long enough you get precisely the style of Henry James. That is a thing which annoys the layman. When he gets an hypothesis he gets it very quickly with very little elimination and he clings to it, and with the varied phenomena, all he does is to take it into the hypothesis. But the scientifically-minded person goes on trying new hypotheses, and all you can get him to see, if you go on in that way, he will bring it down to a point where he may without further qualification approximate another proposition and get a larger and more significant view of the subject, which will enable him to make further inquiry which will in time bring further results.

What can you do with people like that? I am afraid that is the sort of man Dr. Chapin has been; I am afraid he has inquired patiently, that he has rejected things that do not fit into his own theo-

“IF YOU look through his papers and books you will find that devotion to scientific method has been the keynote of the success of the work which he has done; the work which has done so much to further permanent progress.

\* \* \*

We make heroes of men who lead soldiers to death upon the battlefield; tonight we exalt and honor a hero who through his long life of valuable, keen, faithful work, has safeguarded the lives of many, many people in his own city, in his own land, and in lands beyond the sea.”

DR. VINCENT

*In his address at the Charles V. Chapin  
testimonial exercises.*



CHARLES V. CHAPIN, M.D., Sc.D.



ries, not simply because he wants to have his own theories prove true but because he wants the right theories to prevail, and he has been patient, he has made inquiries, he has tested his results, and he has done honest work, and he has shown that scientific spirit which, after all, is the fundamental essential of work in public health, and in any other department of human activity which depends upon accurate knowledge. If you look through his papers and books you will find that devotion to the scientific method has been the keynote of the success of the work which he has done; the work which has done so much to further permanent progress.

In the second place, you come to the delightful subject of statistics. I know what cynical things are said about them. You know them, therefore I will omit them. Dr. Chapin has said that accurate reports of vital statistics are the basis on which public health work must rest. That is unequivocal, and that is another clue to the success of his work. He was made Health Officer in 1884, and in 1886 they made him "Recorder" and he has been recording ever since. If you have Chambers of Commerce and other exuberant organizations here which want to make Providence appear very nice no matter what the facts are, you will have trouble with Dr. Chapin. In St. Paul the health reports would be delayed and delayed and delayed. The Health Officer was holding back his report in the hope that the Census Officer would put in his and commit himself to something, and then you would see an optimistic estimate of the population, and a somewhat sketchy record of the people's death-rate. Those death-rates, if you look back at the reports under pneumonic conditions, age, physical conditions, all that, would produce a pretty low death-rate aside from firearm accidents, but those could be verified separately. You would expect a low rate, but you would not expect that rapid physical immortality which was conveyed in the competitive reports of St. Paul. Dr. Chapin must have been a great disappointment to you. He has such a terrible passion for presenting things just as they are, until the vital statistics of the City of Providence have become a model for the United States, and have a recognized influence wherever vital statistics are known throughout the world.

Now let me give you a little illustration. Of course, in making careful preparation for this

address I looked up the vital statistics for 1925. This is the statement people like to have made: "Dr. Chapin took office in 1884, and two years after, say from 1886 to 1890, the general death-rate of Providence was 20.94. In the year 1925 the death-rate of Providence was 12.32, and Dr. Chapin has been here all that time." Now look at the infant death-rate, which is described by Sir Arthur Newsholme as being the most sensitive indication we have of the social welfare of a community. From 1886 to 1890 the average infant mortality of the City of Providence was 158. That is, of one thousand live-born babies, one hundred and fifty-eight died before they reached the age of one. In 1925, how many was it? Sixty-three. Splendid, but wait a minute! Dr. Chapin, wherever he had a chance to exercise his conscience he always did, and if he could interrupt he would say that it ought to be pointed out that in 1925 it was exceptionally low, and that the death-rate of 1926 is seventy-three, ten more, and the average for the five year period is not sixty-three but ninety-nine. That is the kind of thing that spoils the oratorical effect of statistical contrasts of that kind. But the function of the statistician, as Dr. Chapin conceives it to be, is not to present optimistic statements, but facts that resulted in order that proper procedures and measures may be adopted. Why haven't you a lower death-rate here? Your death-rate is above that of the whole United States. No, frankly, it is not above it, but if you study the situation you will find that you have certain groups in your population which always and invariably bring down the death-rate of any community in which they are to be found in considerable numbers. There are factors there which are very difficult to analyze, many problems which are very elusive and baffling. The causes are so complex and intertwined that it is an extremely difficult thing, and nobody who has scientific sense would dream of making sweeping statements about it.

There was a most interesting study to be made by Dr. Chapin in the year 1865. That was before his influence had begun so much to be felt in the community, but in 1865 there were certain groups of facts available here, but it took Dr. Chapin sometime afterwards to think of using those facts. There were records here of people who died in the year 1865, and there were records here of the people who paid their income tax. They had an

income tax in 1865. That was the first year they had it. They had records of people in Providence who had paid their income tax and of people who had not paid their income tax. So Dr. Chapin thought it would be interesting (having the individual names of the record there was no question about being able to do the thing with accuracy) to find out the death-rate of the taxpayers as compared with the death-rate of the non-taxpayers. And what do you think it was? The death-rate of the taxpayers was 10.8, and the death-rate of the non-taxpayers was 24.2. Did Dr. Chapin undertake to explain that? He did not. He is too scientific a man, and all he said about it was that there were interesting causal relations there, doubtless, and extremely complicated and baffling, but studies of that kind were useful and would be a stimulus to further inquiry as to the interdependence of economic conditions, of death-rates and sickness-rates that might be recorded. And now we are doing that sort of thing, trying to get correspondence. But I have said enough about statistics. You ought to be proud of the statistical results expected of you. You may have something more to do, but you ought to be proud of the fact that your statistics are absolutely trustworthy, resting upon a firm basis, presenting facts as they are. You will have done it because there has been a man since 1886 who has been with complete honesty giving you the facts year by year. You have done such successful health work because you have had good team work, and that is one thing Dr. Chapin has made one of his hobbies in health organizations. And he has laid great stress upon local responsibility. There is a great American democratic principle through public health organizations which have been properly put together and has the right sort of authority back of it, which has resources put at its disposal for carrying out a good, well-considered program of public health.

Then there is a trained personnel. This was easy in the old days. Some doctor who didn't quite hit it off in private practice felt he had a call to go into the work of a public health officer. There was something distinctly selective and providential about these calls. The number was considerable of those who went into public health. Some like Dr. Chapin went into service because they believed in it, because they were drawn to it as a great opportunity to do scientific work for the community.

There was a considerable number who went into it because of large political influence. Dr. Chapin has said some emphatic things about that. He is not a disagreeable person, but he has felt called upon to say emphatic things about political interference with public health work. I was much interested in one sentence of Dr. Chapin's in an article when he was talking about public health problems, and he said something about other problems as well. "There is the appointment or elimination of self-seeking politicians. I know of no solution for this problem." There you are. He knows of no solution for this problem, because the only one is a change in the intent and heart of the policy of a community. On the whole, a community usually gets the kind of politics that it deserves. That is a sound proposition, and if you judge some communities by that, it is a good indicator. There are different standards which can be applied as regards physicians. Dr. Chapin has insisted that public health work, if it is to be done effectively, must be done by people trained to do it and who have in thought no other consideration but the service they can render and their technical ability to do that particular job assigned to them, and if there is any one thing we are thoroughly in need of in public health work it is efficiency, and it is depending more and more upon the complete elimination of political considerations in the appointment of public health officers.

Then there is another thing, and that is called standardization. We have a perfect passion for standardization now. We standardize all our belongings. We standardize everything but portraits, and the time may come of stencils used by skillful artists who will be able to produce a portrait, not like this one, perhaps, but certain kinds of portraits. I have seen portraits that suggested such a possibility, that they were produced in that way. But we are standardizing everything. That is the one thing people who visit America for brief periods of cultural exercise note. They want to go to Ford's factory. They are looking for standardized products, and we go abroad and take them. We are standardizing products and it is being done very well. And interchangeable parts may be available soon so that we will have synthetic citizens fitted with phonographic reproduction of orthophonic remarks to be made on any occasion. Nothing like variation is to be tolerated. We pro-



duce an average type. Robert Louis Stevenson describes the average man as "one who never by any accident says an unexpected thing." There you have standardization. In any process like public health work a certain amount of standardization is acceptable. It is significant that Dr. Chapin has been opposed to what would be regarded as premature rigidity and standardization. In rapid progress there is always a state of flux. He says, "Let there be experiment and not be too quick to decide upon standards and do not impose them upon others until they are tried," and then some things quite obviously can be standardized. Dr. Chapin has steered a middle course between premature standardization and making an inflexible system of public health and a course in which no standards of any kind are imposed anywhere. There is a process which, by gradual experiment and demonstration, standardization gets itself set up after a while. It was a new idea in public health work. If you are doing anything you should praise results. It is very annoying to people of the pneumatic type who make public addresses and who are not keen about statistics, but who quote statistics to show to what this remarkable progress is ascribed by our public health society, and vote for more taxes. It is most unfortunate, but true, that a great deal of the progress which is recorded in the decline of the death-rate and infant mortality is not much due directly to public health activity at all, but is traceable to the gradual improvement of economic conditions, a higher level of housing, wages and education. These death-rates record a great many more things than the City Health Department and the societies and organizations for doing health work had any thing to do with. Dr. Chapin has said—here he is making an estimate roughly—"We have made over one-half the reduction that has been made mainly due to the conscientious and good health work carried on, fully justifying what has been done." This is such a proper statement nobody could oppose it. But the question came up in 1913, people began to say, "What are these various departments doing?" and "The State Departments, how do they compare with each other?" And the American Medical Association said, "We ought to have a study made of the State Health Departments, and who is the man to make it?" Unanimously, and without hesitation, they said, "There is but

one man to make it, and that is Dr. Charles V. Chapin," and so Charles V. Chapin was given the commission, and he traveled all over this country and he studied departments and talked with people, and he finally worked out a report which caused a great deal of excitement. There were State Departments which were not at all intrigued by it. They were able to point out minor errors, and there is nothing that gives people greater satisfaction than pointing out minor errors in a major indictment. And so there were states that showed up pretty well, and you had testimony to the fact that Dr. Chapin by all means was admitted to be the greatest authority in the United States on public health work. Other states did not stand extremely high, and from those that stood very low there was a loud cry. Especially from the more benighted the louder the cry. The cry came from Arkansas, "Are we to be interfered with by some New England Yankee coming here to tell us what to do and how to do it? No. While freedom lives upon the soil of Arkansas we will assert our rights in this respect." But after the discussions have all been made, and the errors pointed out, the fact remains that for the first time in a calm, dispassionate and expert way, an estimate has been made to appraise the value of public health work in the different states of the United States. It was a great stimulus to the movement throughout the United States. It suggested the same sort of thing in other countries. It stimulated rivalry in every department. And when a year or two ago it was decided, under the auspices of the American Child Health Society, to have studies made on the eighty-four models, Dr. Chapin was also the subject of interesting discussion, and the number of facts available, the system that was applied, and all that, has made it a little more difficult to wiggle out of it this time. His appraisal has been a useful thing.

Then Dr. Chapin has emphasized another thing, and that is the co-operation of the medical profession. Now I am going to alarm you for a moment by saying that I found a quotation from Dr. Chapin which is most inappropriate for an occasion of this kind, but I will introduce it because, in view of the scientific spirit in which he says it, I think it is my duty to do it. I have spoken to you about the self-seeking politician being a problem in public health work, and he also said very frankly that it was the physician which was the greatest



health problem of all, and he qualified it by saying—you will see why I mention it—"If every physician was equal to the level of the best, there would be no such problem at all." We have met here tonight under the auspices of the best, and there is no problem at all. But Dr. Chapin called attention to a vital thing in public health work. More and more we realize, especially when we come to the individual in the field of hygiene, that the success of public health work depends upon training and attitude and social spirit of the medical profession. Why are the causes of death attributed to diseases in a number of the countries of the world, in error? That accounts for the cynical remarks we hear about it, because they know that perhaps only one-half of the deaths of that particular country are deaths the results of which are observed by physicians at all, and because they know that the state of medical education in this country, that the diagnoses of the doctors as to the causes of death found by those doctors are subject to terrific error; and when one country submits statistics which include twenty-five per cent from causes unknown you will see how valuable they become with corresponding countries. The League of Nations has been trying to make them more accurate. They got up a diphtheria map of European countries, and the maps delineated disease by a black area, and then shaded off in lighter colors to white where there wasn't any diphtheria at all, and the British Empire pretty nearly seceded from the League of Nations because the only dead black spot in Europe was the British Isles. They told the truth, and the British said that if that was the way things were going to be done they wouldn't furnish any statistics, or if they did they would furnish the same kind of statistics that other countries furnished. That has been a great stimulus, a tremendous stimulus to the matter of more accurate statistics; more careful reports upon the causes of death will be successful in proportion as the medical profession is able to provide the knowledge that is necessary. The co-operation of the medical profession Dr. Chapin has always regarded as essential. I presume these exercises would not be held unless Dr. Chapin had convinced you in some way that he believes in the best of the medical profession, that he recognizes the fact that he himself belongs to the medical profession at the same time that he is an officer of health.

At this point, which is a very delicate point, I have not mentioned certain tendencies, because some of you are of the age which makes me fear your arteries would not stand the strain of one of the vexed questions of the medical profession, as to where public hygiene leaves off and private health begins. Dr. Chapin is a pragmatist. He is admittedly a pragmatist. He has laid down the principles and this is his principle: "Whatever the medical profession can do better than the State the medical profession should do. Whatever the State or a group of private citizens can do better than the doctors, the State and the private organizations should do, whether it is preventive or curative." There you have his principle. Suppose it is diphtheria-inoculation—and the medical profession are very apathetic about it, and you cannot count upon its being done under the present plan. But according to the Chapin theory, then the municipality steps in, organizes work of that kind and sees that it is done. Smallpox vaccination left to the family physician oftentimes leaves much to be desired. There are gaps and lacunæ in that system. But upon this I will dwell no longer, however fascinating it is before a medical society.

And then in addition to this we have that measure insisted upon by Dr. Chapin, instruction of the public. Please note, I say *instruction* of the public, not education of the public. There is great demand upon public health officers to have things enforced by law. It is so convenient. Almost all public health progress made to date has been imposed upon an unwilling population.

This brings about public health progress, but they have to be represented as having read about the works and discoveries of Curie, Pasteur and others. What a forceful factor that is. Our great captains of industry have got a new phrase when goods are not going quite as fast as the advertising people have promised they would. This is the phrase I understand is now used in great industries, that "Sales-resistance must be overcome." Could anything be more charming? And so with public health, "Sales-resistance must be overcome," and much of this overcoming consists in getting laws passed if you can get them passed. Dr. Chapin has wisely said, "Sanitary instruction is more important than sanitary legislation." So we understand this is something that the individual must take care of. And he believes in the long

run that inner compulsion which comes from the intelligence of the individual can be counted upon for more than legal coercion. It is a long, painful process and some communities may perish just because they cannot protect themselves. That is a moot point. Some things ought to be enforced by law and other things must be left to the intelligence of the community. Our greatest achievements, our most spectacular achievements, have been where people have nothing to say about it, as Gorgas' work in Cuba and Panama. There you have the treasury of the United States behind him. No nonsense about educating the public, and see what useful things were accomplished. But this very next point drawn from old Ames when the Constitution was being discussed contrasting monarchy with democracy. He says, "Monarchy is like a ship which sails swiftly and gets you quickly to port, and it sometimes hits a rock and goes to the bottom; but democracy is like a raft: it never sinks but your feet are in the water all the time." But Dr. Chapin believes that he would rather be on a raft that won't sink although it is wet on the feet, in the hope that the raft may be built up and transformed into a more manageable vessel and get somewhere more quickly.

But the instruction of the public is one of the most baffling and discouraging as it is one of the most absolutely essential things in the whole public health movement, and to this Dr. Chapin has committed himself in unequivocal terms. And then the international influence which Dr. Chapin has exercised. I have made allusion to it, and I have been reading one of the papers here from the library of the Public Health Department published under the auspices of the Public Health Society of England, paying tribute to Dr. Chapin for his statistical and scientific work, and it concludes by saying, "No other influence has been so great in keeping in touch the public health services of the two great English speaking continents," and I can certify from the standpoint of the Rockefeller Foundation, from which we send many fellow students to Providence who come here to observe methods, and study this hospital for contagious diseases. I am trying just now—I don't want to make the speech embarrassing—I am trying just now to get a young Chinese doctor in here as an interne. I do not expect it as a result of this speech. I don't want the policy of the hospital to

be influenced at all in the slightest degree, but I mention this to show that these are not empty words of praise, but we are interested in getting those in whom we are interested where they can get opportunities for study in the unique way in which this hospital in the City of Providence is being conducted.

And so I think I have said enough. I think Dr. Chapin thinks I have said enough about his contributions. I have tried to do it without undue adulation. I know how offensive that is to him. But as we look back over this career which I have so hastily and inadequately sketched, there are certain characteristics that stand out distinctly, his intellectuality, his open-mindedness and integrity, his ability to criticise his own work—how few people are able to do that—and to criticise fairly and generously the work of others, his capacity for initiative and solving problems by individual and adequate devices, and his perfect loyalty, which Royce has so well defined as "losing one's self in a great cause."

And so tonight we meet in his honor, but before I close I want to say, I do want to say a word about Mrs. Chapin, because Mrs. Chapin has been more than a companion, she has been a colleague. She has gone on these visits of survey and inquiry with Dr. Chapin. She has taken a keen and intelligent interest and has become a partner with him in the work he has done. She has identified herself with his career, and so tonight when we are congratulating ourselves upon his life we cannot think of him alone, but we think of them together, as working together loyally and gladly and with complete fidelity. It seems to me we must all be moved a little by the thought of Mrs. Chapin. And now as we have let our minds go quickly over the past our imaginations have grown a little more vivid, our feelings have been stirred, but words of extravagant eulogy are absent in the presence of his modesty. We express to him our appreciation and our gratitude, our admiration. We make heroes of men who lead soldiers to death upon the battlefield. Tonight we exalt and honor a hero who through his long life of valuable, keen, faithful work, has safeguarded the lives of many, many people in his own city, in his own land, and in lands beyond the sea.

DR. BLUMER: I wonder what ought to be the reaction of any speaker, acting as chairman, to the



rapid fire and wizardry of oratory which we have just listened to and been thrilled by. Personally, I do not think in all my life I have ever known a case of such rapid ideation where words were able to keep pace with ideas without tumbling over each other and producing incoherence. I am quite familiar by many years experience with what is called "manic utterance." Manic utterance is usually incoherent. But after this perfectly amazing exhibition, of course I, who am at the opposite extreme, mentally retarded and still more retarded in speech, do not propose to establish any longer than I can help the "ridiculousness" (using Dr. Vincent's word) the ridiculousness of the contrast between his method and mine. I can only say that we are very grateful to him for what he has done in coming here and for what he has said this evening, and also for showing beyond all doubt and peradventure that he does after all illustrate that ideal of Milton with which, as a counsel of perfection, I closed my remarks in introducing the speaker to you.

Now, the next order of business, I suppose, is to call upon Dr. Chapin for some reply. I am extremely sorry for Dr. Chapin. A few years ago when I retired from the superintendency of Butler Hospital I was buried, and have been buried on two or three occasions since then and have enjoyed, in a way, the resurrection, and, to my knowledge, Dr. Chapin had some such sepulture a few years ago when it was my privilege to participate in the proceedings; and knowing by personal experience what Dr. Chapin's emotions are at this time, and knowing how absolutely impossible it would be for any man to make an adequate reply, certainly not a reply that would please himself, to what Dr. Vincent has said in his encomium, I only ask him to rise and say something and so let his voice be heard in this presence this evening.

DR. CHAPIN: Mr. President, Fellows of the Rhode Island Medical Society, I thank you, I thank you for this evening. I thank you particularly for my partner in our work, that she was able to be here. I want to say a word about this portrait. I see many here who were students of Professor Appleton, and you will remember that he talked about many things besides the test for antimony and manganese. Fifty or sixty years ago he talked to me about portraits. He said, in the first

place a portrait should be a work of art. The Committee arranged that this should be one. In the second place, he said it should be attractive. They arranged for that, too, at least they got a skillful artist. And he said of course if he could make it so that the subject's friends could see a little bit of likeness, why, well and good. I thank you.

DR. BLUMER: One more item in this program that has not yet received attention. I think Dr. Skelton wishes to establish some relations of courtesy with Mrs. Chapin.

DR. SKELTON: The Committee of the R. I. Medical Society, have decreed, that not all the honors should go to your illustrious husband this evening. They have asked me to present to you these flowers and picture. May the fragrance of these flowers last you a lifetime. You will recall that "Hamlet told Horatio he could see his father with his mind's eye" yet the portrait of a dear one, brings the face more palpably before the mind's eye than any exercise of the mental vision. May this photo serve you well, when your illustrious husband is away from home with Prof. Gorham, on a "Bug" hunting expedition.

DR. BLUMER: Before adjourning I have two statements to make. The first one, and probably an important one to some of you, is that refreshments will be served downstairs in the dining-room, basement. The other is this, that I should like all of you to rise, men and women, to fill your lungs to the utmost of their expiratory capacity, and to exclaim with thundering voice, "Chapin."

AUDIENCE: Chapin! CHAPIN! CHAPIN!

DR. BLUMER: Still louder.

AUDIENCE: C H A P I N !

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## ANNOUNCEMENT

At a recent meeting of the Woonsocket District Medical Society it was voted that the members should, specifically, stop the insertion of business cards in the newspapers; and generally, refrain from any use of their names in print which might be construed as advertising. This to take effect immediately.

DR. W. A. KING, Sec.



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**R. I. Ophthalmological and Otolological Society**—2d Thursday—October, December, February, April and Annual at call of President Dr. J. J. Gilbert President; Dr. M. J. O'Connor Secretary-Treasurer.

**The R. I. Medico-Legal Society**—Last Thursday—January, April, June and October. Dr. Creighton W. Skelton President; Dr. Jacob S. Kelley, Secretary-Treasurer.

## EDITORIALS

### DR. CHARLES V. CHAPIN

Once again it is our privilege to pay homage to one of our distinguished members of the Rhode Island Medical Society, in the language of Caesar, "Whose fame has gone abroad"; but upon this occasion, to a native son, Dr. Charles V. Chapin.

His established standing as an officer of health requires neither assurances nor encomiums from our pen as a man whose activities and definiteness of purpose have long since placed him in the foremost ranks in his chosen field of work.

The contribution he has made to public health building is not due to accidental findings and may not be likened to the prospector who stumbles upon a gold mine, but is rather the result of constant, persistent painstaking effort.

Possessed of a deliberate, analytical, magnificently scientific mind, untrammelled by fanciful ideas, he has sought the way to truth and demonstrated that facts are not guessed but discovered.

Mystery exists for those who do not see, or seeing do not understand and in the disillusionment of the mystery and method of contagion he has played no inconsiderable part; an additional

fallacy was exploded when some years ago he became convinced that the fetish of fumigation was a fantasy, that the life of pathogenic bodies was not destroyed by a certain quality of atmosphere and this mirage also faded into nothingness.

Working step by step from physician to teacher, from teacher to executive and administrator, his deductions have stood the test and an appreciative nation has placed the "Hall-mark" of credence upon his words and his work.

Of his varied accomplishments, upon pages of this publication, other tongues with greater finish have told, but of the human side of his life's work, who shall authoritatively speak, or tell the cost. Some anonymous writer has said:

"There was scarcely if ever a line of glory written upon the earth's surface, but that a line of suffering ran parallel with it and he who reads the lustrous syllables of one and pauses not to consider the worn and spotted inscriptions of the other gets the lesser half of the lesson earth has to give," which is somewhat of a majestic, not to say melancholy, way of saying that every success has its trials and every achievement its price.

But whatever the trials and whatever their tolls, their impress has had slight effect upon the bearing or disturbed the quiet calm of this unassuming man; unperturbed, he "carries on."

Upon the foundation of fundamental science he has so firmly clung that when the years have rolled on and the lore of Health and Medicine of our day has been written upon pages illumined by deeds of those who have adorned medical literature, in the roster of the world's greatest guardians of health will be found the name of Charles V. Chapin and Rhode Island will have no cause to blush for its history.

---

### MUNICIPAL BATHING

It is the duty of the medical profession to interest itself in any project for public improvement which affects the physical ill or well-being. It is to be supposed that our civilization has advanced beyond the stage of necessity and the perhaps cruder forms of culture to those of convenience and esthetic pride, past the idea that almost anything is good enough for the poor to

the point where the best is none too good for it. We are no longer content with half way measures in public sanitation and deplore the systems of notable cities of the Old World which have wonderful traditions of sculpture painting and literature but with a history that is not pleasant to read, bankrupt governments and an atmosphere which "swells to heaven." Methods of sewage and offal disposal cannot be taken as measures of culture or refinement for in their progress they lag far behind that of other advancements. Filth, however, does not necessarily bring disease and death. Dirty or malodorous drinking water may be free from pathogenic bacteria and consequently cannot cause their specific diseases. The water in a swimming pool may be sufficiently chlorinated to irritate the eyes and taste unpleasantly, but the bather should not object for it is chemically and bacteriologically clean. But there are many who do not particularly care for the taste of chlorine or enjoy that of none too dilute sewage and who prefer the aroma of pine trees or of the ocean to the unmistakable redolence of the cesspool. Some even go so far in their deplorable meticulousness as to prefer for bathing purposes water that is clean and acceptable to the eye as well as to tactile and olfactory perceptions. Such persons would probably prefer clean windows, tasteful and orderly furniture, good books, a clean and convenient kitchen and other features of our present day wholesome life in their homes.

Have we not then passed the stage which would warrant the expenditure of a very considerable sum for a public bathing beach by water which perhaps does not produce disease and death, but which is by any standard of decency absolutely unfit for such a purpose? Is not our plane of civilization rather higher than that which recommends bathing in water which is nothing more or less than diluted and for a large part untreated sewage? Certainly at the present time there is not, nor probably will there be for many years to come, sea water inland from Conimicut and Nayatt lights that is to be recommended for public bathing.

In these days of large enterprises, however, it is quite reasonable to consider the reasonableness of a large seashore tank supplied by filtered sea water within the city limits. The engineering difficulties would not be great, nor should the expense be prohibitive. The bath pavilions should

produce a very considerable income which would go a long way towards paying the maintenance and interest charges. A portion of the pool might be enclosed whereby the swimming season would be very considerably prolonged with consequent increase in revenue and usefulness. The beach should of course be kept in order and in fair weather would be used by many who do not care to bathe.

Such an institution properly constructed and managed would be a preventorium indeed. It would be easy of access, of enormous usefulness and popularity and should be of great interest to all of our profession who have the public welfare at heart.

---

### THE HIGHER EDUCATION OF NURSES

The nursing profession has come to, and passed, the parting of the ways. The die has already been cast and those in charge of the training of graduate nurses now stand committed to a program of "higher" education or perhaps it were better to say *broader* education. This means a training in the fundamental sciences and underlying medicine and nursing. It means a more accurate conception of the nature of disease and much more intelligent co-operation with the doctor in the care of the sick. But the time for the training of a nurse is of necessity limited and the millions of sick poor in the wards of our great hospitals must be cared for. Therefore more time spent in the study of bacteriology and pathology means less time for filling ice caps and attending to the personal necessities of the patient. The line must be drawn somewhere and a decision must be reached as to just what constitutes nursing.

The question arises as to whether it is advisable to train a group of super-nurses who shall be in reality accessory physicians, or to limit the routine education of our pupil nurses to those subjects which are strictly concerned with the technique of nursing. If the latter course were chosen the teaching of fundamental sciences, such as bacteriology and pathology would be practically eliminated and those who wished to obtain a broader conception of disease as an aid in their work would be forced to take up graduate study or to study medicine. With such a limited out-

look as to intellectual and scientific training there is, of course, a very limited appeal to the more ambitious and better educated young women who might consider nursing as a career, and an inevitable lowering of requirements for admission to the training schools: in other words a lowering of the whole intellectual level of graduate nursing. On the other hand if the "higher education" policy be pursued beyond a certain limit and our nurses spend more than a reasonable amount of time in the classroom and the laboratory there is another danger that threatens. We still have our ice bags and our bed pans, and the danger is that our new group of nurses will not know how to handle them. In other words, we have the danger that by spending over much time in the study of disease in theory, the nurse will be prevented from learning the care of the sick in practice and from gaining a mastery of the art of nursing much of which can only be acquired by constant practice and under adequate supervision. Technique, to approach perfection, requires, in any line constant and careful repetition that indeed amounts at times to drudgery, but that ends in a mastery of the procedures involved which is at once easy, efficient, and automatic.

The "higher education" of nurses is becoming a fact and the policy of producing fundamentally better trained graduates must meet with the hearty approval of the medical profession. To substitute for the cleaning of floors, the carrying of trays and other duties which can be as well performed by ward maids, extra classroom and laboratory training is certainly to be encouraged. Other things being equal the college graduate makes the best possible type of nurse. But even as the surgeon cannot spend his time in the study of, for example, the microscopic pathology of bone or the physiology of the thyroid and neglect to acquire automatic skill in the placing of ligatures and handling of the knife, so the nurse must not be allowed in her zeal to acquire a scientific background for her work, to neglect the work itself. On those who have in charge the planning of the course of training of our pupil nurses rests a grave responsibility. They must see to it that no additions in the way of increased lecture and laboratory courses are made which will in any way interfere with the practical training in nursing technique acquired in ward and operating room.



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These photographs are used through the courtesy of Northwestern University Medical School, Chicago. Above is a view of one section of the Physical Therapy Clinic, showing three of the treatment cubicles.

## Physical Therapy Apparatus Designed to Medical Ideals

IN the Dec. 11th issue of the Journal of A. M. A. I were printed the Official Rules of the Council of Physical Therapy of the American Medical Association. These official rules "have been adopted primarily with the view to protecting the medical profession and the public against fraud, undesirable secrecy and objectionable advertising in connection with the manufacture and sale of apparatus and methods for physical therapeutic treatment."

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# THE RHODE ISLAND MEDICAL JOURNAL



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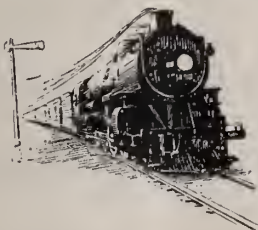
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## ORIGINAL ARTICLE

### CAESAREAN SECTION\*

By BARTON COOKE HIRST, M.D.  
SPRUCE STREET, PHILADELPHIA, PENN.

*Professor of Obstetrics,  
University of Pennsylvania*

Considering what I could say that might in a measure merit the honor of being asked to appear before this representative medical body, an honor deeply appreciated, I selected as a topic for discussion and interchange of opinions, Cæsarean section. It is an interesting operation with a remarkable history. It has undergone an extraordinary evolution in the last forty years with each phase of which I have been personally familiar. There are indications for a greater variety of technique to meet individual requirements than in any other abdominal operation I can think of; and there is a tendency, it seems to me, both in the expert and the occasional operator, to an undue preference for one type of operation to the exclusion of other methods that might be more suitable in a given case.

It is unnecessary to remind such an audience as this of the history of Cæsarean section; of its frightful mortality until the last quarter of the nineteenth century; that the bull who gored a pregnant woman and thus delivered her had a better mortality record than any surgeon; and that in the center of darkest Africa, savage operators performing this operation according to rites of immemorial antiquity were achieving much better results than the most expert surgeons of the highly civilized countries of the world. Then came the Porro operation, immediately reducing the mortality to a justifiable risk. I wonder, however, if many of this audience remember the incredible crudity of its early technique. For the first two or three years I did what every one was doing then, delivered the unopened uterus through an

enormous abdominal incision, evacuated it, and then ran a couple of skewers through the lower uterine segment at right angles, tied a rubber tube as tightly as possible under the skewers and amputated the uterus above them, leaving a huge uterine stump projecting through the skin of the abdominal wall until it sloughed away. It was Baer of Philadelphia who eventually taught us to drop the stump after the hysterectomy. The modern operation, as every one knows, dates from the Saenger technique, but successive modifications over a considerable space of time were necessary to bring the operation to its present form. The long abdominal incision and the eventration of the unemptied uterus gave place to the short incision, the evacuation of the uterus in situ, the eventration and the suture of the emptied uterus.

The attempts to control hemorrhage by the Esmarcks tube around the lower uterine segment was abandoned. The only points in dispute at present about the technique of the Saenger or Classical operation are the site of the abdominal incision, whether to make it above or below the umbilicus or midway between and the method of uterine suture. I prefer an incision one-third above and two-thirds below the umbilicus, and my method of uterine suture is a separate suture of the endometrium; a two-layer suture of the myometrium; two stay sutures through the latter of fine linen thread, and a perimetrial suture as follows: a long strand of No. 1 gut with two fine curved needles on either end; with one needle a sub-peritoneal stitch like the sub-cuticular is run up the length of the wound; with the other a running Lember suture is applied, the two ends being tied above the upper angle of the wound. This stitch was suggested by Dr. Piper of Philadelphia. Following the development of the Saenger operation came the revival by Frank in 1906 of the old idea of an extra-peritoneal operation. The results of the various methods based on this principle were so convincing, as demonstrated by the statistics presented at the International Congress in St. Petersburg, that in presumably infected cases, some form of this procedure became the standard

\*Read before the quarterly meeting of the Rhode Island Medical Society, December 25th, 1926.



operation in such cases. At present there is a tendency in this country to utilize the technique introduced to us by Dr. Beck as a routine procedure in all cases. In labor obstructed by a fibroid tumor, a modern supra-vaginal hysterectomy or a myomectomy naturally accompanies the Cæsarean section. Then there is a form of operation adapted to frankly and badly infected patients that I have employed for a number of years as the only means of dealing with such cases; the eventration of the unemptied uterus; the division of the broad ligaments and the ligation of the vessels down to the lateral aspect of the uterus; the suture of the peritoneum around the cervix above the lower flap of the broad ligaments and then the amputation of the uterus with a cautery knife above this peritoneal juncture, the uterus being still unopened, but opened immediately after should the baby be still alive, which is unlikely, for when such a case comes to the operator it has often been atrociously mishandled elsewhere and the baby is usually dead. The myometrium of the cervical stump is approximated by sutures and is peritonealized. By this technique, the infected cervical stump is excluded from the peritoneal cavity; it is allowed to drop back as far as its attachment to the parietal peritoneum permits and the rather narrow sinus which communicates with the exterior is drained by a gauze pack, the remainder of the abdominal incision being closed in the usual manner. Finally, as I should have said a few months ago, one must occasionally unite with a Cæsarean section a Wertheim operation on the emptied womb if there is a cancer of the cervix, as I have had to do in several instances. But this now does not end the list of methods of Cæsarean section as I should have said it did a short time ago.

I had the privilege of seeing in Monroe Kerr's clinic in Glasgow this summer a new type of low operation with which I was much impressed and which I have performed seven times since my return home. The operation is exactly like the Beck operation, except that the incision in the lower uterine segment is transverse instead of longitudinal. This incision has the advantages that it is much more easily made than the longitudinal incision running deep under the symphysis; that it is often almost bloodless; that the presenting part is much more accessible; that in a cephalic presentation the head is easily turned out of the

incision by the fingers, a blade of a forceps or a Sellheim scoop; and finally, one of the greatest advantages, the suture of the uterine wound is most convenient.

It might be objected that there is a greater danger of ruptured uterus in subsequent pregnancies and labors. Future statistics must answer this question not only for this but for all forms of the low operation. The question has already been answered for the high operation in the statistics of 4,000 operations published in the *Journal of the British Empire*.

My feeling at present is in favor of the operation just described for general routine use. I like the so-called classical high operation better in placenta prævia and in breech presentations. I prefer the extra-peritoneal operation introduced by myself in cases in which there is reason to suspect infection. I find myself employing the Porro operation only in cases of fibroid tumors; for indubitably and badly infected cases, the extra-peritoneal fixation of the stump is obviously safer than the Porro operation with a dropped cervical stump, as it is in inoperable cervical cancers, while in operable cancers of the cervix coincident pan-hysterectomy is the logical thing to do.

---

#### THE SUBCONJUNCTIVAL METHOD OF CATARACT EXTRACTION\*

JOSEPH L. DOWLING, M.D.

PROVIDENCE, R. I.

In cataract operating, the "safety first" principle is the most important, and the use of some type of conjunctival flap, with or without a suture, is becoming generally accepted by the ophthalmic surgeon because of the universally better results obtained thereby. Previous to my becoming an enthusiast for the use of a flap and suture, I used the usual corneal section, with or without a small flap. My first experience with the flap and suture was the Verhoeff sclero-conjunctival suture, and I used this method almost exclusively for about four years and found it quite satisfactory. About three years ago I first began the technique of making a

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\*Read before the annual meeting of the New England Ophthalmological Society, held at the Massachusetts Eye and Ear Infirmary, Boston, January 18th, 1927.



large pocket conjunctival flap and using a keratome and scissors for the corneal section. This is after the method of Shanker-Husain. Several operations with this method at that time so pleased me that I have used it almost as a routine in all cases of capsulotomy extraction since. In intra-capsular extractions I continue to use the original Verhoeff sclero-conjunctival suture, as with the Husain flap there is too much conjunctival resistance at the time of the lens delivery. I still occasionally do a corneal section with or without a flap, as I did before the flap and suture days, and I am often surprised at the rapid and satisfactory healing, but I never feel so certain of avoiding post-operative complications as in the flap and suture cases. The limbus section is quite satisfactory when the patient is intelligent and well-behaved, but even that type of patient is entitled to the greater protection which a flap insures.

If we in Rhode Island had the advantage of a special eye hospital with well-trained interne-assistants, I might not so advocate the subconjunctival (or pocket) flap, but when one's operating is divided between four or five general hospitals in various cities it behooves one to use methods which are suitably adapted to produce rapid healing of the wound. I have always felt that in ophthalmic operating, any but a highly trained assistant is not only useless but positively dangerous, and that one should continuously use a routine that is applicable in any hospital or home, and I have found the Husain conjunctival-pocket-flap most adaptable. In the more than two hundred cases of Husain flap and suture that I have done under all sorts of conditions and on all types of cases and patients, I have had exceptionally good results, with no infections and but three cases of vitreous escape, and only one of these seriously, this being the case of a very unruly patient. This paper, however, is to discuss the type of flap rather than give detailed report of case records with visual acuity, etc. I shall, however, mention some points of technique which I have found satisfactory in many varieties of operating conditions.

The first principle in cataract operating is to get the wound quickly sealed in order to avoid infection from without or prolapse from within and tonight I hope for a full discussion by the members of the New England Ophthalmological So-

ciety as to their methods of accomplishing this end.

In my method the preparation is as follows. As a routine on the evening preceding the operation the eyelashes are clipped, the eye is flushed with 2% protargol solution and one hour later two drops of sterile 1% atropine are instilled. The eye is not covered. On the morning of operation two more drops of the sterile atropine are instilled an hour before the operation. At the time of operation, I have a nurse instill three drops of four per cent. cocaine in the eye every three minutes for eight doses, followed by two doses of adrenalin, and to quiet the other eye I have her use two doses of the cocaine. During this interval my instruments are arranged, a dozen or more cotton swabs moistened, and everything on the operating table inspected. It is now time to drape the patient's head so that only the eye and a small area of the face is exposed. For a long time I used iodine on the skin and protargol in the eye at this stage, but have discontinued that procedure, as I too often experienced annoying conjunctival injection, and now I use a 1-3,000 bichloride solution for both the conjunctival sac flushing and the skin cleansing. Just before beginning the flap, I give the eye and cul-de-sac a final flush with sterile warm water. A speculum is used during the entire operation, and no assistant is necessary. The pocket flap is made by picking up the conjunctiva six or seven millimeters above the limbus in the mid-line and making a snip into it with a Stevens scissors, and this snip is elongated by lateral snips until an opening eight or ten millimeters wide is made. The flap is then raised with the dissecting forceps, and the subconjunctival tissue is cut and separated with the Stevens scissors up to the limbus, and by lateral movements of the closed scissors, with a few snips, the conjunctiva is separated on both sides of the mid-line around the limbus margin to the equator. The older the patient, the thinner the flap and the more easily it is made. It is unusual to buttonhole the flap.

A keratome is used for the puncture through the sclero-corneal junction, while the flap is being held forward with the forceps. I enter the keratome to the right of the mid-line, passing well into the anterior chamber, and in withdrawing I tend to a left exit. A small amount of aqueous usually follows the keratome. The flap is now lifted forward

and three or four drops of freshly prepared sterile four per cent. cocaine are instilled at the entrance to the anterior chamber, and a few moments are permitted to elapse before completing the corneal section with scissors. A thin, angular, blunt-pointed, sharp scissors is used, and while the flap is lifted with the left hand, the lower blade of the scissors is passed into the anterior chamber through the opening made by the keratome, the other blade being under the conjunctival flap, and the sclero-corneal junction is cut, first on one side of the mid-line, then on the other, until nearly half the corneal circumference is divided. This is the most delicate part of the operation, but is the keystone of its success. Occasionally some blood enters the anterior chamber at this stage, and if so, it should be milked or irrigated out.

An iridectomy is next in order, and this is performed by lifting the flap with the right hand while the iris is brought to the opening with the curved iris forceps held in the left, and now the flap is released, and with the iris scissors in the right hand the iridectomy is completed. The flap is again lifted for a moment when the cystotome is introduced for the capsulotomy. A spoon is now placed under the flap to slightly depress the scleral opening, and the lens-nucleus is expressed by making pressure against the cornea below the center of the pupil in the usual way, and as much of the cortex as possible is also milked out or irrigated according to indications. A curved spatula is now slid under the flap and the angles of the coloboma are replaced. Following this, the flap is smoothed over the globe to approximate its original position, and at this stage I insert one fine silk suture in the mid-line joining the severed conjunctival margins. In cases where I anticipate an unruly patient or a complicated procedure, I insert the suture before making the corneal section, and push the loop aside, thus having the suture ready for immediate use.

I now flush out the cul-de-sac with one per cent. atropine solution, seal the lids of both eyes with boric ointment, and apply a double eye-pad fixed in position with several strips of one inch adhesive plaster. The patient lies on his back, with or without a pillow as he wishes, during the first six or eight hours, and is then allowed to turn on his unoperated side. At the end of forty-eight hours, the eye is dressed (one per cent. atropine instilled)

and the eye-pad replaced, fastened with adhesive strips. The unoperated eye is left uncovered, and the patient may be out of bed at any time from now on. The operated eye is dressed every other day until discharged from the hospital, which is usually at the end of eight days from time of operation. The stitch usually comes out itself, but if not out in ten days it is removed.

To illustrate the protection this flap gives, I shall mention two cases which occurred during the first few times I used this method, and it convinced me of its safety. I went to a neighboring city to do a cataract extraction for an oculist who was temporarily not operating, and I used this method. Everything went along nicely, and I promised to return on the second day to do the dressing with him, but the day following the operation he telephoned me not to come down, as the patient had spoiled everything by leaving the hospital the night of the operation and walked to her home close by, with the aid of her daughters, having suddenly decided to remain away from home no longer. I didn't go near the case, presuming my colleague would attend her, but he was disgusted with her conduct, and, never having used a flap himself, he considered the eye lost. Four days later the family telephoned him, inquiring as to why he hadn't come to see the patient, and said they were anxious to see him, so he decided to take a look, and was agreeably surprised to find the eye thoroughly healed and doing quite well. Very shortly thereafter I performed a similar operation on the only eye of an eighty-six year old woman, who developed post-operative dementia at the end of twelve hours, and when the nurses could not restrain her, as she demanded to go home, we were obliged to send her home at the end of twenty-four hours, following a stormy session, and the bandage was removed. Fortunately, the flap and suture held. At the end of three days, the patient's hand slipped upward while pulling at the bed clothes and struck her eye, causing an extensive hemorrhage into the anterior chamber, but not disturbing the flap, and the blood gradually absorbed, giving her a nice result.

In brief, the advantages of the flap are rapid healing, with quick re-establishment of the anterior chamber, small likelihood of any post-operative complications, and early activity of the patient, with short hospital convalescence. The only dis-



advantages which observing colleagues have raised have been the time required to make the flap and the occasional subconjunctival hemorrhage, but I consider these factors negligible. Therefore, in ideal cases, this flap is helpful; in unruly and complicated cases, it is a great safeguard.

## AS TO THE STATE HOSPITAL FOR MENTAL DISEASES\*

BY SAMUEL I. KENNISON, M.D.  
PROVIDENCE, R. I.

*Mr. President, Dr. Harrington, Members of the R. I. Medical Society, Members of the State Public Welfare Commission, and Guests:*

### APROPOS

Recently, in the public press, reference was made to the fact that many of the State Institutions were on a fairly high plane structurally and as to equipment. The question was raised that, with improved facilities, what was being done for the individual inmate, who, it was taken for granted, would in time be sent back to the community. This is my answer as to what is being done at the State Hospital for Mental Diseases, at Howard, R. I.

### OUR AIM

Dr. Harrington has shown us how the present State Hospital for Mental Diseases has evolved from the old "Asylum." He has shown us how, under a magnificent guidance, the equipment, the personnel, and the management of such an Institution has been steadily and purposefully directed to as near a standard of perfection as is possible under the circumstances. He has shown us the goal to which he would attain.

All this process of improvement, beginning with the early idea of protecting society from the "madman," has now reached the stage of considering the patient with a "Mental Disease" as an individual, part of the entity known as "Society," or the "Community." It should be our aim to cure, alleviate, watch, and advise, so that his, or her, return to the community will not be a part of a

vicious cycle—an allotment to the community—and then the community's allotment in return to the hospital, etc.

### A GREAT LABORATORY

In order to gain the proper perspective as to how this is best done, we must consider the whole institution as a laboratory—each individual a separate and distinct case, to be considered from many angles of approach. All the effort made to arrive at a proper conclusion may, in a way, be considered experiments upon which we may base methods of approach and analysis in future cases.

Naturally, this great laboratory is composed of a physical, or bodily, side, and a mental, or psychic, side. The physical side presents the same problem as it would in any general hospital. The mental phase is properly the duty of a hospital specializing in such work. The most efficient way to correlate both the physical and psychic viewpoints is to have the supervision of all clinical and laboratory findings referred to and supervised by a clinical director. All records of the patient relating to his physical life or his mental life, not only during his stay in the hospital, but all facts and details concerning his life before admission to the hospital, and his life after leaving the hospital, should be centralized under the director's control. The importance of such a supervision can be seen when we see certain cases whose mental condition is a direct result of some physical ailment. Here the ward physician can be directed to give certain treatments which some physical or laboratory test has shown to be indicated. The clinical director should have direct supervision over all specific laboratory work, in order that he might the better be able to correlate the laboratory work with the clinical work. He should also be in a position to give consultation diagnosis from the laboratory point of view. Take, for instance, a case of pernicious anæmia. Here the mental condition may be, and probably is, due to the blood condition. With the proper interpretation, the patient is easily classified as "Phychosis with Somatic Disease." The problem then concentrates itself down to medical care in the case of pernicious anæmia. Again, it is important that a reading of a positive Wassermann in an advanced tubercular case should be properly interpreted; the same may hold true in the case of an alcoholic. The clinical findings in a

\*Read before the quarterly meeting of the Rhode Island Medical Society held at the State institutions, September 2d, 1926.



syphilitic and an alcoholic may be very much the same, even to the extent of finding a positive Wassermann in an alcoholic which disappears without treatment.

#### MODUS OPERANDI

The modus operandi at this hospital is as follows: Each patient coming to the hospital gets a physical examination upon admission before he is sent into the ward. Later, upon the ward, he receives a more complete physical examination, and a cursory mental examination. The names of patients are listed in a Roster Book, which is available to the laboratory. Every patient coming into the hospital receives a complete blood examination, a complete urine examination, and a Wassermann test, and any other tests requested by the attending physician. If the blood Wassermann is positive, the patient automatically receives a lumbar puncture. If the patient has a positive blood Wassermann, a positive spinal fluid, or any other specific findings, he is brought to clinic on Wednesday morning where his case is fully discussed before all the staff, and decision as to the proper course of treatment is made. If the case is one of General Paralysis, or any form of specific disease, and if the patient appears to be physically able to stand treatment, a course of Neo-arsphenamine, or Sulphar-sphenamine, is instituted. This is given in the following way: Ten courses of ten treatments each constitutes a complete series. Between each ten treatments, a rest period, varying from six weeks to six months, depending upon the physical condition of the patient, is usually given, so that a full course of treatment should take about three years to complete.

On mornings, other than Wednesday, cases are brought up for mental diagnoses, and then the laboratory findings, which are filed in each case, are gone over carefully to find any possible connection between the physical and mental pictures. If any special laboratory work is indicated, requests for same are sent to the laboratory.

Upon admission to the hospital, every female patient, as a routine, receives a vaginal examination, and smears (urethral, vaginal, and cervical) are made and sent to the laboratory. The male is examined routinely, and if any discharge is noted, smears are also made and sent to the laboratory.

In this way we are able to check the spreading of any venereal disease amongst the inmates, and are in a position to institute proper treatment in those cases which have gonorrhea.

Patients returning from parole must undergo the same examinations.

Upon admission, each patient is inoculated with typhoid-paratyphoid vaccine in order to prevent spread of typhoid fever.

Upon Thursday mornings, X-Rays are taken of routine cases, and emergencies are done on call.

Friday morning treatments with arsenicals are given in the laboratory.

All special work, such as making of autogenous vaccines, culture of stools, special urinary analyses, in fact, all laboratory proceedings, whether of a chemical, serological, or bacteriological nature, are done upon request.

All laboratory findings are filed under a card system, giving the date of each and every laboratory proceeding, so that reference may be made to the Day Book, where a complete report of the findings can be found. In the same laboratory office are kept the files of every patient in the hospital, classified as to his, or her, mental disease diagnosis. There is a special file for deaths, discharges, and paroles. At the end of each year, these cards are filed according to mental diagnosis, to which they may be referred.

In the same office, all records of treatments with arsenical preparations, that is, as to nature of reaction, condition of the urine, which is examined every week for albumin and bile, or records for luminal administration in the case of all epileptics, whether in the hospital or on parole, and all data for eighteen yearly tables for National Mental Hygiene Association, are kept.

From our files, reference may be made to any special laboratory procedure upon any patient at present, or in the past, in the hospital, and any statistics desirable can thus easily be made. For instance, if it is desirable to determine percentage of alcoholics in the hospital, a reference to the files will quickly determine same.

#### SOME RESULTS EFFECTED

Let us see how important these various proceedings are: Some years back there was a time when cases of General Paralysis were bed-ridden. Their care was a great expense, and no treatment of a

special nature was given. The facilities for Wassermann tests or spinal fluid examinations were lacking. Today we have many cases who, serologically and physically, have been cured; others who have been so much improved that they carry on their every-day work and come to the hospital weekly for treatments. In these instances, it is impossible to measure the great saving to the State on one hand, and to the community on the other hand. Other cases, although needing strict hospitalization, are able to be up and about the wards and about the grounds doing odd jobs in different forms of manual labor. There are very few cases necessitating confinement to bed.

In the instance of the checking of venereal disease by the examination of all women routinely, we have prevented the spread of Gonorrhea in the institution. This is very important, as you may readily surmise.

By the administration of typhoid vaccine, which we make here at a saving to the State of, roughly, \$700.00 per year, we have prevented the presence of typhoid fever, so that we have not seen a case in over four years, when a few years before then the cases were in epidemic proportion. In short, all these procedures have aided the individual patient, and, in aiding him, have aided the community, which, in all probability, will again receive him on a par when he leaves the hospital.

We are working on the problem of isolating all tubercular cases, which would mean a routine X-Ray of the lungs of all patients admitted, and the careful physical examination of cases already in the hospital. In order to be effective, after such a survey is made, it would be necessary to have an isolation ward for tubercular patients; lacking that, it is next to impossible to properly segregate them. This will be one of the next big steps necessary to do service to the community through the individual patient.

When the patient leaves the hospital, he is referred for further supervision and care to our "Out-Patient Department," which holds sessions twice monthly at the Thayer Street School. We might consider this as our "Mental Laboratory." Here we collect data, and give treatment and advise the patient and his relatives, and direct return to the hospital, if conditions warrant. This is a tremendously advanced step, as we are able

thus to keep our patients out of the hospital and still receive hospital supervision.

In certain cases of mental defectives and peculiar psychoses, such as psychosis of pregnancy, effort to obtain permission for oöphorectomy is made and sometimes permission obtained. This should be more general. Castration, also, should be considered in certain cases discharged from the hospital.

We try to obtain permission for as many autopsies as possible, in order to get what information we can as to the physical and central nervous system.

Helping the parole patient, and thus helping the community indirectly, is the work of the Social Service Department. They are able to place the patient in congenial surroundings, probably removing the former unfavorable surroundings which aided the admission in the first place. They are able to supervise the care and observation of the parole patient. By explaining the patient's peculiarities and particular mental disturbance to the employer, oftentimes shortcomings are overlooked which never could be in the every-day, ordinary existence. They investigate certain stated facts of the patient, or of his relatives. In this way we are able to give the patient all the credence due him, so that he may not be misunderstood, and so that he may not be unjustly persecuted, or that no instance of animosity may enter a patient's admission, existence in, or discharge from the hospital.

#### WHAT WE WOULD LIKE TO SEE

These are the things we are doing. This is how we are trying to improve the present condition of the patient and his existence upon discharge. But we do not go far enough. In the medical field in general, new work is being done to conquer all phases of disease. Research and experiments are being undertaken to kill out cancer, pneumonia, tuberculosis, etc.; but where are we as concerns mental diseases? What important knowledge have we gleaned as to the causative agent of Dementia Præcox? Or what is the etiology of epilepsy? We are woefully lacking in research in the field of mental diseases. There are a great number of foundations for cancer, tuberculosis, and other research, but there is no special foundation for research in mental diseases. Perhaps this is due to the fact that most mental diseases are treated in

State Hospitals, where the effort is to keep down expense, and further expenditure for special research would not be tolerated or approved by the community. The attitude of the public in considering a mental disease as shameful has hindered progress, too. The ideal condition would be that of a psychopathic hospital where the individual could be sent until such time as clinical and laboratory procedures determined whether the psychosis was of a temporary or permanent nature. In this way the stigma attached to a mental disease hospital, in spite of all efforts to the contrary, would not prevent the admission of patients before more serious aspects of mental disease arose.

#### IN CONCLUSION

The growth and improvement in the custodial properties of the hospital has been approached by the improvement in the last five years of modern laboratories equipped for all forms of laboratory procedures. The laboratories have done all routine work as in a general hospital and any special work as indicated. The aim of the laboratory has been to do everything possible for the betterment of the patient, and has treated each one as a special and distinct problem. The patient has been carefully examined physically and mentally before he is discharged from the hospital, and when on parole, his activities are carefully watched and supervised so that he may not be a danger to the community. In short, this is our effort to make hospitalization as short as possible, and the patient's return to society as long and beneficial as possible.

### CLINICAL CONFERENCES

For the month of April, 1927

- April 1 Dr. H. B. Sanborn  
"The Treatment of General Paralysis"  
Rhode Island Hospital
- " 5 Dr. F. E. McAvoy  
"Surgical Treatment of Gastric Ulcer"  
St. Joseph's Hospital
- " 6 Dr. Geo. W. Van Benschoten  
"Diseases of the Conjunctiva and the Lids"  
Rhode Island Hospital

- April 8 Dr. Maurice Adelman  
"Diseases of the Blood in Children"  
Rhode Island Hospital
- " 12 Dr. M. H. Platt  
"Medical and Neurological Aspects of the Anemias"  
Memorial Hospital
- " 12 Dr. A. A. Barrows  
"Diagnosis of the Acute Surgical Abdomen"  
Rhode Island Hospital
- " 13 Dr. T. E. Duffee  
"Deafness in Patients Under 25"  
Memorial Hospital
- " 14 Dr. F. V. Hussey  
"Cancer of the Breast"  
Memorial Hospital
- " 15 Dr. McLoughlin and Associates  
Medical Clinic Woonsocket Hospital
- " 15 Dr. H. G. Calder  
"Metabolic Diseases of Childhood"  
Rhode Island Hospital
- " 19 Dr. E. M. Porter  
"Injuries of the Hand"  
Rhode Island Hospital
- " 20 Dr. A. H. Miller  
"General Anaesthesia"  
Rhode Island Hospital
- " 20 Dr. J. I. Pinckney  
"Diagnosis of Tuberculosis in Children"  
Providence City Hospital
- " 26 Dr. G. A. Matteson  
"Surgical Diseases of the Kidney"  
Rhode Island Hospital
- " 27 Dr. Wilfred Pickles  
"Local Anaesthesia"  
Rhode Island Hospital
- " 29 Dr. C. A. McDonald  
"Psycho-Neurosis"  
Rhode Island Hospital

### FOUND

In the auditorium of the Medical Library, following the meeting of the Providence Medical Association, March 6th, an abridged aid to digestion. Owner will please enquire at the Library.



# THE RHODE ISLAND MEDICAL JOURNAL

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Meets the first Thursday in September, December, March and June

H. G. PARTRIDGE	<i>President</i>	Providence
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### DISTRICT SOCIETIES

#### KENT

Meets the second Thursday in each month

FENWICK G. TAGGART	<i>President</i>	East Greenwich, R. I.
J. F. ARCHAMBAULT	<i>Secretary</i>	Arctic, R.I.

#### NEWPORT

Meets the third Thursday in each month

WILLIAM S. SHERMAN	<i>President</i>	Newport
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#### PAWTUCKET

Meets the third Thursday in each month excepting July and August

STEPHEN A. KENNEY	<i>President</i>	Central Falls
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#### PROVIDENCE

Meets the first Monday in each month excepting July, August and September

HENRY J. HOYE	<i>President</i>	Providence
P. P. CHASE	<i>Secretary</i>	Providence

#### WASHINGTON

Meets the second Thursday in January, April, July and October

M. H. SCANLON	<i>President</i>	Westerly
WM. A. HILLARD	<i>Secretary</i>	Westerly

#### WOONSOCKET

Meets the second Thursday in each month excepting July and August

EDWARD L. MYERS	<i>President</i>	Woonsocket
WILLIAM A. KING	<i>Secretary</i>	Woonsocket

**R. I. Ophthalmological and Otolological Society**—2d Thursday—October, December, February, April and Annual at call of President Dr. J. J. Gilbert President; Dr. M. J. O'Connor Secretary-Treasurer.

**The R. I. Medico-Legal Society**—Last Thursday—January, April, June and October. Dr. Creighton W. Skelton President; Dr. Jacob S. Kelley, Secretary-Treasurer.

## EDITORIALS

### CLINICS RESUMED

The clinics conducted under the auspices of the Rhode Island Medical Society will be resumed on April 1st. It was deemed wise not to hold them during the busy winter months this year because physicians found it difficult last year to spare the time to attend them during January, February and March. It is hoped and expected that the clinics to be held during April and May will be well attended.

The men who are selected to conduct them spend considerable time in preparing for them and

something can be learned at each one by physicians who attend. Physicians need constant stimulus to keep abreast of the times and even if the clinics are not presented by men as capable as teachers in medical schools, any physician will receive helpful suggestions and many new ideas by sparing a little time to attend them.

This year 204 physicians have matriculated, indicating that there is considerable interest in these clinics, and it is hoped that they may become a permanent institution. Elsewhere in this number will be found a roster of the clinics to be held during the month of April.

*INCESSUS MULIEBRIS*

To Virgil, her gait revealed the goddess. The influence of Greek civilization favored perfect physical development and still prevented physical deformity from appearing to the Romans as desirable. In the grotesque semi-civilization of the dark ages of Europe, production of physical deformities, especially among women, became customary. These customs have lasted almost to the present time. The gait of women has been hampered by corsets and pads, impeded by heavy, trailing skirts which had to be lifted at every step, and deformed by mis-shapen, high-heeled shoes. Thirty-five years ago, Frances Willard wrote: "I have met very few women in this country who really walk at all. Wrigglers, hobblers, amblers and gliders I am familiar with among the ways of women, but walking is an art hereditarily lost to our sex." A stylish woman's walk was little more free than the mincing gait of a Chinese woman with bound feet. It was then believed and taught that there was a fundamental difference in the gaits of men and women, due to the difference in anatomical structure. Sex could be determined by considering the gait.

At the present time, freed from artificial constriction, impedence and deformity, the athletic young woman walks with a gait at least the equal of her brother's. No longer is her sex indicated by her gait. The fault which was attributed to anatomical structure was, in fact, due to induced deformity. Because of the favorable effect on the health of the community, the medical profession must strongly favor some features of the present tendency in woman's dress. Comfortable shoes and clothing free from constriction and restraint are essentials for proper physical exercise.

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*PUBLIC INSTITUTIONS*

In this country there is a growing tendency to multiply and enlarge institutions of all kinds. The expense of these institutions has grown rapidly during recent years, until the burden is eliciting complaint from the supporters of charitable institutions and from the tax payer. No one can deny that hospitals, institutions for the insane and feeble-minded, almshouses, orphan asylums and

other such institutions are necessary for the care of the sick, the aged and the destitute. There is no better index of the state of our civilization than the manner in which such dependents are provided for. But there is danger of encouraging people to seek admission to public institutions for their dependents, even when it is not necessary, to lighten their own burden.

In the case of hospitals, it has been found that by establishing social service departments it is possible to send patients home much earlier to finish their convalescence there. The long arm of the hospital can still keep a hand on the patient through home visits of social workers, visiting nurses, and by his attendance at the out-patient departments until he is well. This has made it possible for the hospital to serve efficiently a larger number of sick people without increasing the size of the hospital. Some cities require that nearly all cases of scarlet fever and diphtheria be hospitalized to prevent their dissemination. Hospitalization of about ninety per cent. of these diseases in London and other English cities for over thirty-five years has not lessened their prevalence. This practice has required large contagious hospitals and great expense. Infectious disease hospitals are very necessary to take care of patients coming from among the poor who cannot furnish adequate care. It is also important to hospitalize patients where there are other children in the family and isolation is impossible. Patients from boarding houses, schools, and institutions must be hospitalized. In some cities, however, patients have been hospitalized when it was not necessary. Hospital beds are greatly needed in many parts of the country, but there are cities in this country which are competing with each other.

So, too, the hospitals for the insane and feeble minded are striving to put back into their homes every mental case which is not a real menace to society. The hospital still claims them as patients, and watches over them, but saves on bed capacity while they are at home.

Institutions for the custodial care of children and infirmaries for the aged should be abolished so far as possible. If children are real orphans, someone should take care of them, and the State should place them in homes, if possible, where they can grow up under normal conditions. When one parent lives, or there are other responsible near

relatives, they should be made to care for them at home, assisted by State funds if it is necessary.

Perhaps the saddest picture of all is that of aged parents and near relatives who are discarded by their families and railroaded to the almshouse. The State should prevent this, if possible, and when it is evident that such dependents put too heavy a burden upon the family, it is better and cheaper for the State to pay for their care at home. Institutional life is not a normal life, and besides, it is expensive.

Institutions are necessary, and always will be, but it behooves the public to watch out that they are not abused by irresponsible people.

### PROFESSIONAL EDUCATION

In the midst of our campaigns to educate the public in matters medical, we have not failed to recognize the not inconsiderable need for further education of the rank and file of the profession. The clinics held the past two seasons have constituted a gesture in the right direction, and meetings like the recent symposium on heart disease are of immense value to those attending.

These measures, however, fail to get at the root of much of the failure of the profession adequately to deal with the problems of every day practice.

A great advance in efficiency and in value to the public could be gained without imparting a single new fact to any physician, if physicians could be persuaded to use the knowledge they already have.

Many a patient suffering from nephritis or diabetes goes without a correct diagnosis because his medical advisor neglects a simple uranalysis. Few patients admitted to the sanatoria for tuberculosis are sent by the first physician who sees them. In most of these cases, a check of the pulse and temperature, together with the briefest history, is sufficient at least to suggest the proper diagnosis.

A determination to add to his knowledge at every opportunity is the mark of a good physician. Not less so is the conscience which compels him to give of his best to everyone who seeks his aid.

If every physician in the State would determine to spend sufficient time upon each case to arrive at that careful diagnosis to which his patient is entitled, the resulting good to the community

would be much greater than that derived from the all too thinly attended clinics, valuable as they are, and would go far to restore the profession to the place in public esteem to which it should aspire.

### SOCIETIES

#### RHODE ISLAND MEDICO-LEGAL SOCIETY

The Regular Quarterly Meeting of the Society was held in the Medical Library Building, 106 Francis Street, Providence, on

Thursday, January 27, 1927, at 5 P. M.

Paper—"The Medico-Legal Aspect of Roentgen Ray Practice"

By ISAAC GERBER, M.D., of Providence, R. I.

Following adjournment, a light supper was served.

#### RHODE ISLAND MEDICAL SOCIETY

The regular quarterly meeting of the Rhode Island Medical Society was held Thursday, March 3, 1927, at 4:30 P. M., at the Medical Library Building, the President, Dr. H. C. Partridge, in the chair.

The minutes of the preceding meeting and of a special meeting of the House of Delegates were read by the Secretary.

The President announced to the Fellows the death of two members since the last meeting, namely:

Dr. Frank S. Payne, Westerly, R. I., on January 2, 1927.

Dr. Jacob C. Rutherford, Wakefield, R. I., on February 15, 1927.

The matter was referred to the Committee on Necrology for suitable action at the annual meeting.

The following papers were read:

1. "Autonephrectomy" Value of Pyelography. Report of five cases. Illustrated with lantern slides.  
Vincent J. Oddo, M.D., Providence, R. I.  
Discussion opened by Dr. J. Edwards Kerney.
2. Dr. Bayard Crane, of Rutland, Mass., and Dr. V. Y. Bowditch, of Boston, spoke briefly upon a phase of the work being done at the



Rutland Sanatorium, explaining in brief the principles underlying the Industrial Colony for the Tuberculous.

This was discussed by Dr. H. L. Barnes.

3. "Mental Health and Education."

Arthur H. Ruggles, M.D., Providence, R. I.  
Discussed by Dr. H. B. Sanborn.

4. "Cancer of the Cervix." Illustrated with lantern slides.

Herman C. Pitts, M.D., Providence, R. I.  
Following adjournment, a collation was served.  
Adjourned.

J. W. LEECH  
*Secretary*

#### PROVIDENCE MEDICAL ASSOCIATION

The regular February meeting of the Providence Medical Association was called to order by President Henry J. Hoyer at 8:40 P. M., Monday evening, February 7, 1927. As this meeting was a joint meeting with the New England Heart Association, the usual business program, including the reading of the minutes of the preceding meeting was omitted by unanimous consent. In the absence of Dr. Chase, Dr. Pickles was elected Secretary Pro-tem. The Standing Committee having approved the applications of Dr. Craig Stevens Houston and Dr. Charles Howard Jameson, these applicants were elected to membership.

The first paper of the evening, "Heart Disease and Pregnancy," was presented by Dr. Burton E. Hamilton of the Boston City Hospital and the Boston Lying-In Hospital. From a series of cases studied during the past six years he has devised a method of classifying patients having cardiac involvements of pregnancy into three main classes. In the first group he places all cases of neuro-circulatory asthenia, and patients with cardo-respiratory murmurs and extrasystoles. These patients are in no danger, and require only reassurance and the establishment of a proper regime. In the second group he places those who have possible or definite heart damage but of moderate degree. This includes those having systolic murmurs with thrills, and these patients require no special obstetrical care. The third group includes the severe cardiacs; those having diastolic murmurs, gross

cardiac enlargement, or a history of previous decompensation. The patients in this group require very careful management throughout pregnancy and parturition. As evidence of the importance of this work, Dr. Hamilton pointed out that twenty percent of the entire maternal mortality at the Boston Lying-In Hospital was due to this last group of cardiacs.

Dr. Paul D. White, of the Massachusetts General Hospital, presented the second paper of the evening, his subject being "The Clinical Value of Electrocardiography." After a brief description of the Einthoven Galvanometer and its use in Electrocardiography, Dr. White discussed the value of the mode of investigation in heart disturbances other than the arrhythmias. With the aid of numerous lantern slides, he showed the normal and abnormal variations of the p., gr.s., and t. waves of the tracing, and discussed the information to be gained from these changes.

Dr. Frank T. Fulton of the Rhode Island Hospital read the third paper of the evening on "Rheumatic Heart Disease." After a brief resumé of the historical aspects of the subject, he gave a careful description of the pathological anatomy of this disease, from this going on to a discussion of the clinical findings, illustrating his description by means of several illustrative case records.

Discussion on all three papers was reserved until the conclusion of Dr. Fulton's paper, and was participated in by Drs. Henry Jackson, Buffum, Westcott, Armington, Streker, Partridge, Hamilton and White. Dr. Buffum's discussion was of particular interest as comprising a brief preliminary report on the work of the Children's Cardiac Clinic at the Rhode Island Hospital.

The President announced the following appointments: Member of the Collation Committee, J. Merrill Gibson; Member of the Publicity Committee, Creighton W. Skelton.

At the Medical Library in the afternoon there was a demonstration of heart cases by Dr. William H. Robey and Dr. Samuel A. Levine. The attendance was 65.

The meeting adjourned at 10:40 P. M., attendance 140; collation was served.

WILFRED PICKLES  
*Secretary Pro-tem*

The regular monthly meeting of the Providence Medical Association was called to order by the President, Dr. Henry J. Hoyer, Monday evening, March 7, 1927, at 8:50 o'clock.

The records of the last meeting were read and approved.

An obituary of Dr. Frank L. Day was read by the Secretary and it was voted that it be spread on the records, a copy sent to the *Rhode Island Medical Journal* and a copy to the nearest relative.

The Standing Committee having approved their applications, the following were admitted to membership: George Vincent Coleman, Raymond F. Hacking.

The President announced Dr. Jones' appeal for subscriptions of the members to the Walter Reed Memorial. Dr. Peter P. Chase showed a series of X-rays of eight cases of fracture of the femur treated this fall by the methods advocated at the October meeting by Dr. Chase and Dr. Charles O. Cooke. Dr. Cooke discussed this.

The first paper of the evening was by Dr. Frank T. Fulton, entitled "Remarks on the Treatment of Pneumonia." He discussed the serums and decided that in Type 1 only was there much evidence of good results. This should be given intravenously and very early, at least by the third day. He made a plea for a competent technician in the State Laboratory who could do emergency typing. The use of oxygen can be of great value although most methods of giving it are very inefficient. At the Rockefeller Institute patients are kept in a sealed room with the oxygen concentration at a proper height. Dr. Fulton showed a portable machine devised by Warren of Boston whereby a tent over the patient has a constant supply of oxygen, the air is cooled and freed of carbon dioxide and oxygen content is easily tested.

The paper was discussed by Drs. Pitts, Burgess, Kelley, Wing, H. A. Cooke and Fulton.

The next paper was by Dr. John H. Morrissey of New York City on the "Renal Factor in Chronic Gastro-Intestinal Symptomatology and Its Surgical Indications." After a discussion of the subject of referred pain and referred function he dealt particularly with the nervous innervation of the different parts of the genito-urinary tract and the gastro-intestinal symptoms in his series of 104 cases of non-suppurative disease in this tract.

This was illustrated by a large series of X-rays and schematic plates.

The paper was discussed by Drs. Eric Stone, Kerney, Jameson, Corvese and Morrissey.

A rising vote of thanks was extended to Dr. Morrissey.

The meeting adjourned at 11:15 P. M. Attendance, 85. Collation was served.

Respectfully submitted

PETER PINEO CHASE  
Secretary

#### WASHINGTON COUNTY MEDICAL SOCIETY

The forty-third annual meeting of the Washington County Medical Society was held at the Elm Tree Inn, Westerly, Wednesday morning, January 12, 1927.

Dr. Walter J. Grenolds and Dr. Richard B. Shea, both of Westerly, were elected to membership, making the total membership 32.

The following Resolutions on the death of Dr. Frank I. Payne, who passed away January 2, 1927, were adopted.

WHEREAS, It hath pleased Our Heavenly Father in His Infinite Wisdom to remove from our midst our beloved colleague Doctor Frank Irvin Payne, and

WHEREAS, The Washington County Medical Society has thereby sustained the loss of one of its members whom it feels has been an honor to its membership; that he was held in the highest esteem by his colleagues and by the community at large; that he was a faithful and conscientious physician and, when sickness overtook him, bore the ministrations of failing health with an admirable fortitude; therefore be it

RESOLVED, That the Washington County Medical Society extend its sympathy to his bereaved family;

RESOLVED, That, as a mark of honor to him and his name, a copy of these Resolutions be sent to his family, spread upon the records of this Society, and published in the RHODE ISLAND MEDICAL JOURNAL.

The report of the Treasurer showed the Society to be in a prosperous condition financially.

Officers for the ensuing year were elected as follows:

President—Dr. John Champlin, Jr., Westerly.

First Vice-President—Dr. J. P. Jones, Wakefield.

Second Vice-President—Dr. John W. Helfrich, Westerly.

Secretary and Treasurer—Dr. W. A. Hillard, Westerly.

Auditor—Dr. S. C. Webster, Westerly.

Censor for Three Years—Dr. J. D. Barber, Westerly.

The new President appointed Drs. John Champlin, C. Grant Savage and Milton Duckworth as the Legislative Committee.

Adjourned and dined.

W. A. HILLARD, M.D.  
*Secretary*

Meeting of Woonsocket District Medical Society held Thursday, January 20, at 8:30 P. M. at Trinity Club, Blackstone Street, Woonsocket, R. I.

Paper on legislative matters by Dr. E. F. Hamlin. Important matters were taken up. Special luncheon. Cigars and cigarettes.

EDWARD L. MYERS, M.D., *Pres.*  
WILLIAM A. KING, M. D., *Sec.*

## HOSPITALS

### ST. JOSEPH'S HOSPITAL

The regular monthly meeting of St. Joseph's Hospital Staff Association was held March 11, 1927, in the Out Patient Department, Plenty Street. There were 50 members in attendance. President James Hamilton presided. Report was made of a very successful banquet at the Hotel Biltmore, February 9, 1927, 85 members of the staff being present. The banquet was opened by President James Hamilton, who turned over the post-prandial exercises to Dr. John B. McKenna,

who acted as toastmaster. Rt. Rev. William H. Hickey, Bishop of Providence, the first speaker of the evening, spoke on loyalty of the staff to the Hospital. He was followed by Mgr. Peter E. Blessing who urged obedience to the regulations of the Hospital and staff rules. Dr. Frank Dunbar, of the Pathological Laboratory of Tufts Medical School, spoke on the relation of the laboratory to the physician. Patrick P. Curran, Esq., talked on "Beyond the Law." The committee in charge of the banquet were Drs. Andrew Mahoney, Vincent Oddo, Earl Kelley. The committee was given a rising vote of thanks by the Association.

Dr. Charles A. McDonald talked to the staff on "Thieving in Problem Children," presenting a few selected cases. He spoke of prenatal influences, laying particular stress on the methods of examination, study of the individual, including personality reaction, social investigation, bio-chemical, medical, psychic, temperament and intelligence. This was followed by a general discussion in which Dr. McDonald answered all questions put to him.

EDWARD F. BURKE  
*Secretary*

### THE MEMORIAL HOSPITAL

The following is a copy of the minutes of the last meeting of the Memorial Hospital Staff held January 6, 1927:

Meeting called to order at 9:00 P. M. by President Wheaton.

Report of Secretary read and approved. Twenty-one members present.

Report for Medical Service by Dr. Wing.

Report for Surgical Service by Dr. Jones.

Report for Eye Service by Dr. Dowling.

Report for Orthopedic Service by Dr. Hammond.

Deaths discussed by various members of the Staff.

Paper of evening by Dr. C. H. Jameson on "Unilateral Hydronephrosis":

SOURCE OF CAUSES: Mechanical obstruction, as Tumor, Pregnancy, Congenital Valves, Strictures, Anomalous Vessels.

CASE PRESENTED: Blackboard diagrams demonstrating abnormal vessels causing Hydronephrosis.



Stressed importance of early investigation and cure by operation to save kidney structure.

Paper discussed by members of Staff. Discussion closed by Dr. C. H. Jameson.

Remarks made by Mr. George A. Carpenter, one of the Trustees.

Meeting adjourned at 10:15 P. M.

JOHN F. KENNEY, M.D.

*Secretary*

The following is a copy of the minutes of the meeting of the Memorial Hospital Staff held February 3, 1927:

Meeting called to order at 9:00 P. M. by President Wheaton.

Report of Secretary read by Dr. Robert T. Henry and approved.

Reports of Services: Surgical Service, Dr. Jones; Medical Service, Dr. Greenstein; Pediatric Service, Dr. McLaughlin.

Twenty-two members present.

Discussion of deaths on various services. Report of case by Drs. Oulton and Gilroy, Tubo-Ovarian following question of Puerperal Sepsis with Acute Appendicitis.

A very interesting paper was read by Dr. Lambert Oulton on "Remarks on Cholecystitis." Discussion by Dr. A. T. Jones, Dr. E. S. Wing and Dr. E. Shaw. Discussion closed by Dr. Oulton.

Dr. Jones was appointed as a committee of one to see that a suitable floral piece be sent to Mrs. John F. Kenney's funeral as a tribute from the Staff of the Memorial Hospital. Also that the members of the Staff meet at the Hospital Saturday morning and attend the funeral at the church in body, and that a note of sympathy be sent to Dr. Kenney by the Secretary.

A letter was read from Mr. James L. Jenks, Secretary of the Board of Trustees of the Memorial Hospital congratulating the Staff on the excellent condition of the Case History Records.

ROBERT T. HENRY, M.D.

*Secretary pro-tem.*

Memorial Hospital Staff Meeting held March 3, 1927:

Meeting called to order by President Wheaton at 9:15 P. M. Records of previous meeting read

and approved with the following correction: The President, Dr. J. L. Wheaton, in place of Dr. Jones, was appointed a Committee of one. Attendance, 14 members. Dr. J. Greenstein reported for the Surgical Service. Dr. W. J. Dufresne reported for the Medical Service. The paper on the subject "Ureteral Stricture" by Dr. Alfred M. McAlpine of Providence was most interesting, pointing out in particular the frequency of ureteral kinks or strictures simulating surgical abdomens, and the frequency of occurrence among the usual surgical cases. Numerous X-ray plates were shown.

Dr. C. H. Jameson was present as a guest and opened the discussion of the paper. Others entering into discussion were Dr. H. B. Moor and Dr. E. A. Shaw.

The President, by request of the Superintendent, called the attention of the doctors to the importance of written diets for special patients being made for instruction of nurses and greater satisfaction of all concerned.

Adjourned at 10:08 P. M.

STANLEY SPRAGUE, M.D.

*Secretary, Pro tem.*

## OBITUARY

### FRANK LESLIE DAY

The death of Dr. Frank Leslie Day occurred at his home September 21, 1926, from cerebral thrombosis incidental to arterio sclerosis of many years duration. Dr. Day began his medical career comparatively late in life but under such favorable conditions as to soon acquire an extensive clientele, the confidence and esteem of which he continued to enjoy until the end of his life. He was a man of the highest ideals, both in his profession and in civil life—a citizen of the best type. His efforts in all that pertain to the development and the welfare of the public institutions of the city and state have long been recognized and these efforts, together with his generous benefactions at his death, will perpetuate his memory. By his associates in all these connections he will be remembered as a man of clear and right thinking and sound judgment; by the community, as a good

physician devoted to the relief of the sick and suffering wherever he found them; and by his intimates, as a genial companion and a good friend. In his passing the Providence Medical Association has suffered the loss of one of its most prominent members, conspicuous alike for his professional attainments and his high character.

GEORGE L. SHATTUCK

EDGAR B. SMITH

ALBERT H. MILLER

## MISCELLANEOUS

### A CLASS DINNER

The Class of 1877, College of Physicians and Surgeons, N. Y., held its 50th anniversary at The Grotto, Columbia University Club, on March 1, 1927. Dr. Francis Huber, as secretary, secured the attendance of 11 members out of the surviving 36 in a class of 118.

The members present were: Drs. Wellington Campbell, Short Hills, N. J.; Charles L. Dana, 53 West 53rd St., N. Y.; A. H. Friedenberg, 1 West 85th St., N. Y.; W. B. Hewitt, 717 12th St. N. E., St. Petersburg, Florida; F. Huber, 209 East 17th St., N. Y.; J. J. McNulty, 47 West 42nd St., N. Y.; Alfred Meyer, 1225 Park Ave., N. Y.; C. N. Raymond, 147 Reservoir Ave., Providence, R. I.; C. C. Rice, 52 Park Ave., N. Y.; H. B. Shaw, 4 West 123rd St., N. Y.; A. O. Snowden, 1058 Main St., Peekskill, N. Y.

A very choice dinner was provided by the secretary and it was evident that "age had not dimmed or custom withered" the appetites and thirst of the attendant guests. For Bacchus was there as well as Ceres.

The dinner period was occupied not with eating and drinking alone, but with a riot of reminiscences concerning ancient times in 23rd Street. Stories were told of the habits of our ancient professors, Alonzo Clark, Thomas, Lefferts and others. The quaint or dominant peculiarities of some of our classmates were recalled, also the surprise which many felt at having passed examina-

tions. All this anecdotal past was carried on in merry mood and the passage of 50 years seemed quite forgotten. It surely was evident that none of the faithful eleven had lost any of the physical or mental fire of youth. We all assured ourselves that we still were young.

Silent toast to our departed classmates.

After the dinner was finished, soberer trains of thought developed. Dr. Huber gave a most interesting account of all the living members of the class and read letters from many of the absent.

Later the conversation developed various viewpoints as to the spiritual value of life. These merry but sober young-old men all seemed to feel kindly toward a belief, not in spirits—but in spirituality—as part of the conception of the biological unit; and we came near to making definite contributions to a kind of scientific piety as a trait of the Class of '77.

We finally drank a hearty toast to our efficient and generous secretary, Dr. Huber, and parted with the hope and belief that we would renew this function soon, either in The Grotto or perhaps later in more celestial regions.

It was evident that all of the festive eleven had been given an old age such as Apollo gives to his cherished children.

*"integra*

*Cum mente; nec turpem, . . .*

*. . . nec cithara carentem."*

—"Age with sound mind,  
integrity, and one lacking in joy."

(C. L. D.)

## ANNOUNCEMENT

### AMERICAN BOARD OF OTOLARYNGOLOGY

The following examination dates have been assigned by the American Board of Otolaryngology:

Washington, D. C.—Episcopal Eye, Ear and Throat Hospital, Monday, May 16, 1927, at 9 o'clock.

Spokane, Washington—Saturday, June 4, 1927, at 9 o'clock.



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These photographs are used through the courtesy of Northwestern University Medical School, Chicago. Above is a view of one section of the Physical Therapy Clinic, showing three of the treatment cubicles.

## Physical Therapy Apparatus Designed to Medical Ideals

IN the Dec. 11th issue of the Journal of A. M. A. were printed the Official Rules of the Council of Physical Therapy of the American Medical Association. These official rules "have been adopted primarily with the view to protecting the medical profession and the public against fraud, undesirable secrecy and objectionable advertising in connection with the manufacture and sale of apparatus and methods for physical therapeutic treatment."

Quoting further from the A. M. A. Bulletin of the House of Delegates: "It is hoped that the medical profession will give consistent support to this effort for sound therapy. Physicians may well follow in their choice of apparatus and in their work the opinions of the Council on Physical Therapy as to what is reliable."

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# THE RHODE ISLAND MEDICAL JOURNAL



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## ORIGINAL ARTICLES

### INTESTINAL OBSTRUCTION\*

By DR. EDGAR B. SMITH  
Providence, R. I.

I trust that I need not offer to this audience any apology for introducing a subject that Moynihan calls "the gravest and most disastrous of emergencies."

The subject of intestinal obstruction is not a new one nor can I hope to present any new methods of diagnosis or treatment, but the gravity of the symptoms and the tragic result of this condition is perhaps sufficient justification for a brief review of the causes leading up to it and of the treatment for it.

Generally speaking, intestinal obstruction is either acute or chronic. The acute form may be either mechanical or inflammatory and, among its causes, may be mentioned appendicitis, strangulated hernia external or internal, loops of intestines through defects of the mesentery, impacted gallstones or enteroliths, and Meckel's diverticulum.

Of all the causes of acute intestinal obstruction appendicitis is the most common because it is the most frequent cause of peritonitis and the condition for which the abdomen is most often opened.

Neoplasms, of which carcinoma is most common and that practically always in the large intestine, non-malignant polypi, pelvic tumors outside the bowel, diverticulitis of the sigmoid, are most often the cause of chronic obstruction.

Hirschsprung's disease, for example, may be a cause of obstipation amounting practically to obstruction.

I will mention here a case that came under my observation and for which I operated with complete relief:

A woman of fifty had suffered for many years from chronic constipation so that at times com-

plete obstruction seemed imminent. On opening the abdomen the colon, especially the sigmoid, was found greatly distended and seemed abnormally large. It was apparent that the cause of the obstruction was low in the pelvis. The utero-sacral ligaments were found to be strong fibrous cords so tight and so close together as only to admit two fingers between them. Dividing one of these ligaments cured her obstipation and greatly relieved her constipation.

Another thing that stands high in the list of causes of intestinal obstruction is operative trauma. Operating through too small an incision necessitating the harsh use of retractors, violently pulling up the intestine, crowding in gauze packs for walling-off purposes should be avoided. I am convinced that in the presence of infection where there is peritonitis, either local or spreading, it is safer to do what surgery is necessary through a liberal incision and without the use of walling-off gauze at all though an abscess is present.

A physician is never confronted with a more serious condition than that of acute intestinal obstruction. The patient presents evidence of great distress, anxious facies, cold clammy skin, distended abdomen, vomiting—often explosive and foul. The vomit soon becomes more copious and regurgitant and the patient will surely die unless promptly relieved.

Deaver describes the following symptoms as very grave: "Hyperperistalsis at first, soon diminishing, silent after awhile. With the stethoscope a tinkling sound is heard due to the action of the diaphragm on the fluid contents of the bowel, this, with the silent belly, is serious."

The sooner these symptoms are interpreted correctly and surgical relief given the better.

Diagnosis is not always easy to make but, when called to a patient suddenly seized with acute abdominal pain with vomiting and distended abdomen, obstruction should be suspected. History of a previous abdominal operation adds much to the certainty of the diagnosis.

Without relief from morphia, and enemata producing no results the patient becomes rapidly

\*Read before the Providence Medical Association Oct. 4, 1926.

worse, the vomit becomes foul and constant and the condition is desperate.

In high up obstruction the apparently satisfactory result of enemas often encourages delay beyond the point of safety. However, only the lower bowel is emptied and real relief of the obstruction has not been obtained.

Moynihan claims that "75% of the mortality of intestinal obstruction is due to delay" and says that "when abstriction is *suspected* operation is indicated." "When the diagnosis is made beyond a doubt the favorable period has passed. Conditions change so rapidly that every hour is valuable."

We have found in our experience that the symptoms of obstruction coming on a few days after operation are the most difficult of correct interpretation. The patient seems to be doing fairly well for two or three days. Rather more vomiting and distention than we like to see, but enemas yield pretty good results. Still, the patient does not look just right. More enemas are given with less result and by the fourth or fifth day when the vomiting becomes regurgitant we suddenly realize that the patient is very sick. If the operation had been a clean one and no drain used, angulation should be suspected. Exploration is indicated and relief expected. Active cathartics should not be given in this condition.

Obstruction immediately following suppurative cases is caused by the paralytic ileus of peritonitis. In the latter condition, and in the very late cases of obstruction from other causes, high jejunostomy is undoubtedly the operation of choice and frequently is a lifesaving measure. This can be done quickly under novocaine anesthesia. This slight operation takes care of the reverse peristalsis and furnishes an outlet for the gases and accumulated toxic material and may be all that is needed for a cure, or it may be only a relief measure to tide the very sick patient over until a time when a more radical operation may be done with greater safety.

Too much surgery is dangerous in these cases. Prolonged operation with evisceration is to be deplored. "More lives are lost by doing too much than too little."

The safety of the patient depends more on the early relief than on the means employed. Deaver says, "When in doubt reveal the light of day with the aseptic scalp." Finney says, "Better do a

poor operation on a patient in good condition than a good one on a patient in poor condition."

Previous to the advent of aseptic surgery the abdominal cavity was rarely invaded by the surgeon's knife. Intestinal obstruction was described by the older writers but the conditions causing it were only revealed at autopsy. The mortality was about 100% with the rare exception of an occasional spontaneous cure of an intussusception by the sloughing off of the invaginated portion after three or four weeks of suffering.

The treatment in those days was opium internally, leeches and turpentine stupes to the abdomen. If the distension became so great as to seriously embarrass respiration the bowel was punctured with an aspirating needle.

I quote the following from Gross' Surgery, published in 1872: "As to the propriety of enterostomy in such cases the question presents great difficulties. Of these the most important are the uncertainty of the nature of the disease and the fact that the division of the peritoneum is always attended with extreme risk to life, especially when it is severely congested if not actually inflamed. An operation may be performed for one of two objects, either to relieve internal strangulation or to establish an artificial anus, as when the obstruction depends upon the existence of carcinoma of the colon. In the former case, the peritoneum must necessarily be cut; in the latter, on the contrary, it may readily be avoided by making the opening in the lumbar region. In two instances, in which, after mature consultation with eminent physicians, interference was deemed advisable, I signally failed in conferring the slightest benefit by these procedures, one patient dying at the end of four hours, the other in less than thirty-six. I have myself no fancy for this kind of interference. In internal strangulation, depending on intussusception, a twist, or the interception of the bowel by an aperture in the omentum, the diagnosis is so uncertain that the proper time for relief is usually allowed to pass before an operation is agreed upon, and when, at length, it is performed, the case must, almost of necessity, speedily terminate fatally."

Statistics of today seem to show a high mortality without much variation in the different clinics. Not much progress has been made in late years toward bettering this condition, and surgeons agree that the delay in getting the patient



to the operating table is largely responsible for the present high death rate. High jejunostomy is our best hope in late cases. I quote from a paper by Tuttle, appearing in the Boston Medical and Surgical Journal of April 23, 1925, the following interesting table showing "the rising mortality of delay" and which pretty well represents the experience of most of us:

	Cases	Deaths	Per cent.
Under 6 hrs.	13	0	0.
Under 12 hrs.	25	1	4.
Under 24 hrs.	39	7	15.4
Under 48 hrs.	50	9	18.
Under 3 days	70	17	24.3
Under 4 days	84	26	30.9
Under 6 days	99	37	37.4

In cancer of the colon and rectum, if taken early before the patient becomes dehydrated and loaded with toxins, fairly good results may be expected from resection. Colostomy will always retain its place in operative surgery as a palliative and life-prolonging measure in the treatment of inoperable cancer of the colon and rectum.

The death rate is still high even in conditions that ought to be curable. Still we are curing more cases of cancer than formerly, yet there are more cancer deaths than ever. Tuberculosis is under much better control, still it takes a heavy toll, and the deaths from heart disease at present exceed the number of those dying of tuberculosis.

Our art and science have advanced a lot since the time when, even in England, men were hanged for stealing a sheep and lunatics were treated as criminals. Perhaps we need but a further increase of civilization that must come from the calm intellect of wise men.

### PRESENTING SYMPTOMS IN UROLOGY\*

HAROLD JAMESON, M. D.  
Providence, R. I.

Urological cases present rather definite symptoms. Pyuria is probably the commonest symptom varying in degree from a few leucocytes to the condition where the voided urine is grossly milky. Attendant upon pyuria may be other manifestations of urinary infection, namely frequency, dysuria, dribbling, incontinence of stranguary.

\*Read before the Pawtucket Medical Association, December 16, 1926.

The presence of such symptoms place under suspicion the entire extent of the urinary tract. The offending factor is then to be discovered after systematic search.

A second important presenting symptom is hematuria. Bleeding from the urinary tract demands the promptest attention and should be immediately investigated to determine its source. A few hours delay may render impossible the demonstration of the source of bleeding and postpone for years the recognition of pathology which in the interim may make sinister progress. Hematuria, again only a symptom, may have its source at any level along the urinary tract. The problem presented is to find a source. Accompanying symptoms may and often do supply valuable hints but the problem of actual demonstration remains.

A third presenting symptom is pain. The pain factor supplies information which is frequently of value in localizing the seat of pathology. However there is a great tendency for pain reference in the urinary tract, both along the size involved and to the opposite side. Therefore pain alone can not be depended upon to indicate the site of pathology.

Various phases and combinations of intrinsic urinary symptoms call attention to the system involved. Seldom, however, do these symptoms present without secondary general symptoms manifesting the influence of the local pathology upon the organism as a whole. Indeed the secondary symptoms may and often do divert attention from the true source of trouble. Thus most careful history taking and physical examination are essential to direct special attention to the proper source.

What cases should be examined urologically?

The physician from time to time encounters clinical cases which he at once concludes should be examined urologically. Of that type of case nothing further need be said here.

A second type of case is that which presents itself and is for some time treated as a case of simple cystitis. Bladder lavage and internal medication fail to produce expected improvement. A simple cystitis should clear up rapidly under well directed treatment. The many cases that do not will be found to have an underlying pathology which is inaccessible to simpler therapeutic measures. Diagnosis can be made only upon completion of the urological examination. A physician



recently stated that his attendance upon meetings of urologists was always of practical value to him and added: "I see so many less NERVOUS bladders than formerly."

Again one should remember that some portion of the urinary tract can be responsible for the most obscure abdominal symptoms. In the past many a case has been operated upon once, twice, even three times on account of chronic ill-defined abdominal symptoms which have ultimately been traced to a source within the urinary tract. In short it is advisable to make a urological examination of your patients complaining of ill-defined abdominal symptoms prior to the performance of the so-called "exploratory operation" unless a definite indication for the latter exists.

Finally I would enter a plea for immediate urological examination of every case presenting urinary bleeding. This symptom ranks of equal importance with hemorrhage from other sources, namely the lungs, breast, the gastro-intestinal tract, and the uterus. It is strange that among the laity, and indeed not rarely among members of the medical profession, hematuria is regarded as of little moment. This point of view is possibly a heritage from South Africa, the home of that peculiar infection Bilharziosis so prevalent that the young natives do not feel that they have reached manhood until they urinate a red stream! But certain it is that every case of urinary bleeding will be found to have a pathological basis of gravity with neoplastic disease occurring with sufficient frequency to warrant immediate investigation if only to rule out that condition.

For determining the significance of these symptoms, the equipment is simple and the technique not complicated. First of all the value of the general and special history, and the physical examination is of paramount importance. Then for the local examination one can assemble a valuable array of data, by the use of complete urine analysis, three glass urine test, urethral bougies, metal sounds, urethral catheter, etc. Total kidney function is easily performed. The use of plain films of kidney and bladder regions and preparation of cystograms will afford much valuable information. In addition to the above data is that to be obtained from use of the cystoscope and ureteral catheter making possible inspection of the bladder mucosa, segregation of kidney urines with cultures and separate functions, and pyelography.

It is seldom that employment of these methods fail to unravel the problem by affording the scientific basis for a successful therapeutic attack.

It will be of interest to review briefly the histories of a few typical cases.

Case 1, C. P., male, fifty-eight, complained of urethral stricture acquired following a case of gonorrhea twenty-five years ago. Present symptoms are difficult urination with small stream, cloudy urine, dysuria and frequency and dribbling. No pain and general health good. Examination finds a dilatible urethral stricture of filiform size. Urine is grossly infected and contains albumen. Total renal function fifty per cent. The prostate gland is chronically infected but not hypertrophied. General condition fair. Under treatment the calibre of the urethra is dilated to number 22F. after two months and patient's condition much improved. Pyuria persists however. The three glass urine test shows equal and considerable turbidity of each specimen. Investigation now shows the absence of bladder residual, a chronically infected bladder without stone or diverticulum and pus issuing from right ureter. Functional test shows diminution of fifty per cent on infected side. Film demonstrates large pear-shaped calculus in right kidney pelvis. Removal of calculus by pyelotomy is followed by subsidence of pyuria and improvement of renal function.

This case illustrates the effects of long continued urethral obstruction and infection, the presence of the "silent stone," and the value of the three glass urine test.

Case 2. I. B. unmarried female, thirty-four, complaining of frequency and burning for about twenty months. For two years indefinite discomfort in the bladder region so that eighteen months ago a ventral suspension of the uterus was performed to relieve the frequency which was thought to be due to the pressure of the retroflexed uterus upon the bladder. At this time referred for hysterectomy but bladder symptoms warranted investigation. Cystoscopy reveals ulcerations about the right ureteral orifice suggesting tuberculosis. Right pyelogram and ureterogram show dilatation characteristic of chronic infection, no stone. Tubercle bacilli found in the sediment from the bladder and from the right kidney. Left kidney uninfected and function

adequate. Right nephrectomy and partial ureterectomy performed. Kidney extensively involved and ureter much thickened.

In this case original bladder symptoms were ignored though of paramount importance, and a year and a half valuable time lost.

Case 3. F. C., married female of forty-four complained of frequent urination and menorrhagia each of about nine months duration. Examination showed a woman in apparent good health whose uterus was irregularly studded with fibroids. The urine showed frequent pus cells. Hysterectomy was performed for the large fibroid uterus. Normal convalescence. Bladder symptoms increased. Bladder examination showed pus issuing from the left ureter and bladder mucosa essentially normal. Left kidney function in twelve minutes diminished to three per cent as compared with fifteen per cent on the right. Large calculi demonstrated by X-ray. Left nephrectomy performed with removal of pyonephrotic kidney and multiple stones.

Again illustrating renal calculi without pain.

Case 4. D. M., schoolboy of ten, son of a physician. Well developed and apparently healthy although for the past year he had complained of slight frequency and occasional dysuria. Father had noted that the urine had been constantly cloudy but had thought little of it. General examination was negative except for a thickening of the left epididymis. Microscopic examination of bladder urine showed much pus, a few red cells, and frequent tubercle bacilli. Further examination showed that the right kidney was involved with opposite one free from demonstrable disease. The diseased organ was removed and the boy is in good health four years later.

Practically the only symptom in this case was cloudy urine.

Case 5. A. M. age thirty-two, housewife, during her third pregnancy suffered from right sided pain, intermittent fever and scalding, frequent urination at times. Three weeks after normal delivery at term referred with fever (101°-104°) and gross bleeding from the bladder. Investigation showed right pyelitis with dilatation of kidney pelvis and ureter. Colon infection was demonstrated. Pelvic lavage followed by relief of all symptoms which have not recurred after three years; no subsequent pregnancies.

In this case is seen bleeding from an acute recurrent colon pyelitis.

Case 6. H. B. a farmer of fifty-eight with good past history bled from the bladder six weeks before coming to the hospital. The day before he was seen in consultation he again bled and had some colicky pain in the left flank. Physical examination was negative except for moderate resistance in the left flank. Urine was still grossly colored a wine red. There was no fever. Plain X-ray films were negative for stone. Cystoscopy showed a normal bladder but blood was seen spurting from the left ureter. The pyelogram showed the attenuation of the superior calyces suggestive of new-growth. Adequate function of the right kidney having been demonstrated, the right kidney was removed and found to be extensively infiltrated by hypernephroma. The patient is in excellent health fifteen months later.

After the initial spasm had subsided before operation the enlarged left kidney was palpable. Had this patient been in the habit of having a "periodic health examination" this operation might have been performed six months or a year sooner to his great advantage.

Case 7. H. P. a high school athlete of seventeen, for eighteen months had recurrent pain in the left side of the abdomen occurring every two or three weeks and requiring morphia. Attacks ascribed to severe indigestion. Urinary symptoms lacking and urinalysis negative. General physical examination showed excellent condition. Complete urological examination demonstrated absence of infection but showed hydronephrosis of the left kidney and normal ureter. The suspected obstruction at the uretero-pelvic junction was demonstrated at operation in the form of an anomalous lower polar artery the size of a slate pencil. Obstruction removed by division of artery with complete subsequent relief of symptoms and preservation of renal function.

This case brilliantly illustrates the value of urological examination in the case of obscure abdominal symptoms.

These few remarks and brief histories illustrate the types of pathology discovered upon pursuing the causes of presenting urological symptoms. As in every other type of pathology the desirability of early recognition is to be stressed. The simplest symptoms have their significance and in the realm of the genito-urinary system it is usually possible to discover the ultimate significance of these presenting symptoms and so be prepared to remove the cause.



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**R. I. Ophthalmological and Otological Society**—2d Thursday—October, December, February, April and Annual at call of *President* Dr. J. J. Gilbert *President*; Dr. M. J. O'Connor *Secretary-Treasurer*.

**The R. I. Medico-Legal Society**—Last Thursday—January, April, June and October. Dr. Creighton W. Skelton *President*; Dr. Jacob S. Kelley, *Secretary-Treasurer*.

## EDITORIALS

### THE CONVENTION

The Convention of the American Medical Association will be held this year from May sixteenth to May twentieth in Washington, D. C. It will probably be the largest and most comprehensive medical gathering of its kind of the year and one can be assured that the papers will be fairly authoritative. A physician would find it exceedingly hard to escape several papers of considerable

interest and importance to him. The chief difficulty for the average doctor is that many interesting papers occur at the same time. Symposia give the audience most complete summaries of their various subjects. Not only is the field broad, but it is thoroughly covered. At the present time Rhode Island has no medical school to stimulate these physicians. It is urgently hoped that every doctor in this state who can possibly attend the convention will be there for his own benefit, as well as to encourage future conventions of the Association.



## AS TO NUTRITION

During the past few years considerable work has been directed toward the problem of proper nutrition. Each of the food constituents, namely, carbohydrates, proteins, fats, vitamins, salts and water, has been studied. Carbohydrates and fats have for the most part yielded their secrets rather easily. Salts of the body and vitamins are now being energetically investigated. Water metabolism has never been so well understood. Proteins, because of their infinitely more complex chemistry, have withstood the onslaught of science more successfully than other foods. At the present time, however, some valuable data is available, and is demanding recognition from the clinician.

Protein constitutes about eighteen per cent. of the human body and is replaced mostly by the protein intake. Proteins are broken down by digestion into amino acids, whose molecules are much simpler than that of protein, and in which form it is utilizable by the body. About eighteen of these amino acids are well known, and certain of them, lysine, tryptophane, cystine and histidine, are essential. Although many proteins contain all the amino acids, they are entirely lacking from some other proteins. If the protein is restricted in the diet, for example, it becomes necessary to know that the patient will get the right amino acids. This is particularly important in young individuals, for the effect of amino acids on growth is most marked. We can no longer think and prescribe in terms of proteins alone.

## KEEN MEDICAL SCHOOL?

One wholly unexpected, but very interesting, result of the *Journal's* Commemorative Number, published in January, was the suggestion made by certain members of our profession in Newport that Brown University re-establish its medical school and name it in honor of its most distinguished medical alumnus. The question of the resumption of medical education at Brown is not new; it has been attracting a constantly increasing amount of attention and comment for several years past, both in these columns and in the public press. The arguments in its favor are the existence of clinical facilities of all types necessary to a well-rounded medical education; the increasing

difficulty of placing good premedical students in good medical schools without requiring them to travel great distances; the heightened professional interest which would result with the community a medical center; and the benefit to patients and to the community as a whole following this increased interest. To establish a medical school of the highest grade, and no one would contemplate one of any other sort, great financial resources would be essential. These, however, could be obtained if the necessity for the school were clearly established and if the members of the profession were willing to bend every effort to bring this about. Let us then seriously consider this proposal. If it should come to pass, surely nothing could be more appropriate than that the school bear the name of Dr. Keen, who has done so much for the University, and for medical education in this country.

## FOREWORD

In the following poem delivered at the annual "Chotakhana" of the RHODE ISLAND MEDICAL JOURNAL and now published by the reluctant permission of the author, there are allegorically portrayed the four mechanical epochs in cardiac activity.

Cold type does small justice to the lines, robbed of the voice, cadence and finished delivery of their originator.

In the second stanza one may catch in the drooning monotone, the ceaseless rhymic physiovigil of the heart of the sleeping host, a sense of rest and peace; in the third fire and force leap into the staccato sentences and in fancy there may be drawn a scene of battle and the crash of arms though in the more peaceful mind, a great fear may be pictured and to those of romantic imagination, a lover's fervor would be depicted.

Again the scene changes and the voice expresses the delirium of disease, and of a poisoned heart struggling valiantly against the benumbing embrace of frightful malady that a stifled physical equilibrium cannot conquer. And finally the saddened, hopeless tones and drooping cadence betokens that exhausted muscle may no longer respond to nerve stimulus, that dynamic force has lost its power and the penalty for having lived has been paid.

## "THE HEART'S SONG"

Systole-diastole the whole day through  
 In a never-ending sequence while you live by what I do  
 With your life blood passing through me in a cadence like a song  
 Systole-diastole the whole day long.

Systole-diastole the long night hours  
 While you rest I still am working though I'm garnering my powers  
 For the efforts of the morrow for the travail and the fight  
 Systole-diastole through all the night.

**Systole! Diastole!** is it fear or is it rage!  
 Or perchance it's joy that keeps me knocking 'gainst my bony cage  
 You can sense my throbbing tumult or as keen as joy or fear  
**Systole! Diastole!** when your mate is near.

SYSTOLE! DIASTOLE! you are prostrate on your bed  
 And the poisoned torrent rushes, clouding brain and aching head,  
 I, your ally in extremis, fighting foetid fever's powers  
 SYSTOLE! DIASTOLE! oh the long hours!

*Systole-diastole* now the race is almost run  
 Long the years we've toiled together in the shadow and the sun  
 May the germ cells of our offspring carry what of us is best  
*Systole-diastole systole-diastole systole-diastole REST!*

## CASE REPORTS

### REPORT OF A CASE OF LYMPHADENOMA

BY JAMES P. O'BRIEN, M. D.,  
 AND CONSTANT SCHRADECK, M. D.

(From the First Medical Service of the Rhode  
 Island Hospital)

S. V., aged 16 yrs., a millworker, entered the R. I. H. October 10, 1925, complaining of loss of appetite and weakness of four months duration.

P. I. In the winter of 1924, the patient had an attack of weakness and loss of appetite and sleeplessness from which he recovered. This condition returned in the spring with occasional nausea and vomiting and an unsettled feeling in his stomach. At this time an X-ray of his chest was taken because of suspected tuberculosis, but was reported negative.

Since the spring of 1925 he lost ten to twelve pounds and has never felt entirely well, having periods of weakness and abdominal distress. In August 1925 the patient noted a yellowish tint to

his sclera and his doctor told him he had jaundice. He recovered from this under treatment.

On admission to the hospital October 10, 1925 he felt fairly well but wished to get a diagnosis for his trouble. At this time his weight was eighty-seven pounds.

P. H. Appendectomy in 1922. Mumps several years ago. Jaundice August, 1925. No history of cough, night sweats, although he gets out of breath easily.

F. H. Mother died of shock at forty-six years. Half brother died of T. B. in 1923. No history of venereal disease or malignancy.

P. E. Shows a poorly developed young adult male lying in bed, conscious and cooperative in no apparent distress. Head:—Negative Ears and nose negative to external examination. Throat:—Negative. There is a small cervical gland palpable on the right side of the neck. Tongue not coated. Lungs:—Left—Normal resonance throughout with normal voice and breath sounds. No rales. Right—There is a slight diminishing in voice and breath sounds beginning at the sixth rib posteriorly and a few scattered rales at the base on inspiration. Heart—Sounds clear with a redupli-

cation of the first sounds over the mitral area. Apex in the fifth interspace and palpable about ten cm from the midsternal line. Right border three cm from midsternal line B. P. 115/75.

*Abdominal*—Soft and not tender. A scar of an old incision in the right lower quadrant. No masses palpable. Spleen palpable three cm below the costal margin. Liver and kidneys not palpable. *Extremities*—Knee jerks within normal limits. No clonus to Kernig. *Skin*—Pale, anemic, clear and dry.

Provisional diagnosis:—Splenic anemia. On admission the patient was in fairly good condition with exception of a low white count, a palpable spleen and a small palpable cervical gland.

During the ensuing eight days he had epistaxis and complained of pain over his splenic region. Examination showed the spleen to be six or seven cm below the left costal margin and at the end of this period the temperature advanced to 103 and the pulse to 120 and it remained at this level for eighteen days fluctuating slightly.

Eleven days after admission, his spleen was palpable at the umbilicus. His appetite was poor and his diet chiefly liquids. On consultation with the surgical service splenectomy was advised but shortly after this the temperature went to ninety-six and his pulse to fifty. His condition at this time was poor and he received 450 cc of blood, by transfusion, from his father. After the transfusion, his condition seemed to improve for three or four days, then the temperature rose to 103 or 104 degrees.

During this time the size of the spleen varied directly with the temperature, a rise in temperature would accompany an enlargement of the spleen.

His condition became weaker and he had several slight nose bleeds daily. He also showed increased Knee jerks with bilateral ankle clonus but no Kernig or Babinski. A lumbar puncture showed a normal fluid.

Two days after this he was jaundiced. His condition was serious and another blood transfusion was given with no results. The jaundice deepened and he became weaker, delirious and died sixty days after admission.

**SUMMARY:** A young man sixteen years old, presenting previous weakness, anemia and splenomegalia a marked fever resembling typhoid,

leukopenia and secondary anemia. Other findings essentially negative. Death followed one week of obstructive jaundice.

#### *Laboratory Data*

Date: 10-12; W.B.C., 2,000; R.B.C., 4,000,-000; sahli, 50%; fragility, 40—32%; polymorphonuclears 72, lymphocytes 24, transitional 2, renal function 35-20, blood urea 19, creatinine 1.4, sugar 98.

Date: 10-18; W. B.C., 1,700; R.B.C., 3,470,-000; sahli, 50%; Wassermann, negative.

Date: 10-20; W.B.C., 1,850; R.B.C., —; sahli, 52%; sterile blood culture; polymorphonuclears 50, lymphocytes 50.

Date: 10-29; W.B.C., 2,000; R.B.C., —; sahli, —; fragility, 40—32%; neg. widal.

Date: 11-4; W.B.C., 1,300; R.B.C., 3,020,-000; sahli, 50%; fragility, 38—32%. Bleeding time, 2 min. 10 sec. Reticular reds, 2.9%.

#### TRANSFUSION CITRATE METHOD

Date: 11-9; W.B.C., 4,650; R.B.C., 3,130,-000; sahli, 65%.

Date: 11-17; W.B.C., 3,000; R.B.C., 3,240,-000; sahli, 58%; widal negative.

Date: 11-19. Sterile blood culture. Spinal fluid 5 cells per c. Globulin negative. Sugar reduction normal. Gold, 0011100000.

Date: 11-20. Sterile blood culture. Wassermann negative.

Date: 11-29; W.B.C., 2,800; R.B.C., 2,960,-000; sahli, 50%. Transfusion 500 cc.

Date: 12-2; W.B.C., 3,250; R.B.C., 3,150,-000; sahli, 53%.

Urine, Sp. gr. 1.009-1.023. Sugar and albumen negative. Sediment, from negative to a few W.B.C. and occasional Hyaline cast and coarse granular cast.

Electrocardiogram — 11-10 sinus, arrhythmia with left ventricular preponderance. Rate 66.

X-Ray, 10-10, negative; 11-3, negative.

#### *Necropsy 1925: 58*

Body on an extremely emaciated sixteen years old white male. Moderate anasarca of both legs. Skin deeply jaundiced. Small areas of punctate ecchymoses on skin of chest and face. Diaphragm on the right side at the fourth rib, on the left side at the fourth intercostal space. The abdomen contains about two pints of a yellowish serous fluid. The left and right pleuric cavity contained each



about a pint, and the pericard contains about six ounces of a thin transparent yellow serous transudate. Heart small. Myocard flabby, filled with fluid blood. Left ventricle dilated. Valvular apparatus O. K. Both lungs retract well. They are generally quite anemic, but appear mottled, through the presence of nodules surrounded by hemorrhagic areas, scattered throughout the interior of the lungs and below the pleural surface. In the center of these hyperemic parts which stand out as dark livid red areas against the pale pinkish-yellowish background of the other lung tissue, there are numerous small abscesses and small areas of necrotic tissue. Smears made from the pus of these multiple abscesses show gram positive cocci and gram positive diplococci, few gram negative bacilli, some gram negative cocci and a few spirillae.

Both lungs are of moderate size and on account of the presence of the transudate in both pleuric cavities, appear slightly compressed about the bases.

Abdomen:—Conspicuous is the large spleen which with its lower pole reaches to the level of the umbilicus. It measures 25 x 15 x 10 cm. resp. and in total volume exceeds that of a normal spleen seven times or more. It is of a dark red color generally, but shows many grayish mottled areas upon the surface. On the cut surface the red color of the pulp contain irregular areas of a deeper livid red hue with many small solid yellowish suit-like areas of irregular shape and size scattered throughout the substance of the organ. The follicular substance stands out more clearly after fixation. The remainder of the pulp is soft and hemorrhagic.

The liver weighs 1800 grams. The liver is distinctly enlarged. The gall bladder contains about ½ ounce of a dark greenish bile. Pressure upon the gall bladder results in an abstricted flow of the bile into the duodenum. The surface of the liver is smooth and glistening. A great many small round grayish-white foci are uniformly and evenly distributed all over the surface of the organ. On the cut surface the lobular markings are somewhat obscured. The areas above mentioned are evenly distributed throughout the substance of the whole liver; they appear to be located in the periportal tissue of the lobules. The impression is that these grayish-white areas are composed not of broken down tissue or

abscess formation, but rather of actively proliferating tissue (lymphoblastoma).

The stomach is small and its mucosa shows nothing of note. The intestinal mucosa especially low down towards the ileum is rather thin and atrophic. Towards the colon the thinning out of the intestinal walls is extreme.

A general survey of the lymphatic system shows a fairly uniform swelling of the mesenteric lymphnodes to between double and three times normal size. There is a chain of considerably enlarged retroperitoneal lymphnodes adjoining the lumbar vertebrae column. The periportal lymphnodes below the liver are also enlarged and the dissection of the retroperitoneal mass mentioned above shows extensive chains and clusters of enlarged lymphnodes, and part fused together along the trunks of the abdominal aorta and vena cava which cover in part the head of the pancreas itself is easily detached from the masses of enlarged lymphnodes behind it and shows on gross inspection nothing abnormal; the typical lobulated structure of the gland standing out clearly. The peribronchial lymphnodes are likewise enlarged. The peritrachial lymphnodes especially on the right side are more conspicuously enlarged, the largest being about the size of a 4 c.m. in diameter. On the cut surface these nodes appear to be firmer than the lymphnodes lower down.

The kidneys weight 165 and 155 gram respectively. Their measurements are 12 x 7 x 4 cm. The capsule strips fairly easily. The surfaces are smooth and of a grayish color tinged with olive green, due to imbibition of the tissues with bile pigments. There is a fine network of injected stellate veins scattered over the surface of the cortex. On the cut surface the kidney parenchyma bulges slightly above the level of the capsule cut, this is of rather soft consistency and the cortex is slightly swollen; its relation to the medullary rays being in more than the half of the area exposed in median section 1, 2.

The appearance of both organs on the cut surface is very much alike. The imbibition of the kidney parenchyma with bile pigments imparting to both a grayish-yellowish color tinged with olive green; areas of local infarction or tissue break down were not noted.

*Microscopically:*—The enlarged lymphnodes, the spleen, the liver show microscopically all of them in varying degrees of extension and distri-

bution a tissue the general histological characteristics of which are to be defined as lymphoblastoma.

Reticular endothelial cells, lymphoid cells, large mononucleated and large multinucleated cells constitute the histological mosaic of the tissue which on macroscopical inspection was seen to be present in the enlarged spleen in form of irregular suet-like infiltrating masses scattered throughout the pulp and which in the liver was seen grossly scattered through the parenchyma of the organ in form of delicate pearly nodules situated perivascular and, as microscopical examination shows, located within the periportal tissue. In this location many of the periportal bile ducts are obliterated and compressed by the lymphogranulomatous tissue and afford explanation of the marked general icterus arising from such interlobular periportal obstruction. The nodules described above in the lung tissue contained in part also this type of tissue. In part the nodules showed tissue break-down and liquefaction, apparently through secondary infection in this location.

*Pathological diagnosis:* Extensive lymphogranulomatosis, involving the lymphatic system primarily, with systemic extension through spleen, liver and lung tissue.

## SOCIETIES

### PROVIDENCE MEDICAL ASSOCIATION

The regular monthly meeting of the Providence Medical Association was called to order by the Vice-President, Dr. Edward S. Brackett, Monday evening, April 4, 1927 at 8:45 o'clock. The records of the last meeting were read and approved. The Standing Committee having approved their applications the following were elected to membership; Haralambie G. Cicma and George W. Burton. Dr. Alex W. Burgess reported two cases and showed X-ray films. In the first, the X-ray showed a typical picture of consolidation although physical examination showed absolutely no signs of this. In the second case the conditions were exactly reversed. Dr. Wilfred Pickles gave the paper of the evening on amputations of the lower extremity under nerve block anesthesia. After a short history of the development of local anesthesia he sketched the

different methods of application—infiltration, field block and nerve block and then gave the steps for nerve block of the thigh showing how reach the sciatic, femoral, obturator and lateral cutaneous nerves and scattering branches of the ilio-inguinal, etc., by a bracelet injection under the skin. He also showed the technique for lower leg blocks through the sciatic in the popliteal space. The mental state and bodily comfort of the patient should be considered. The indications for this method are poor surgical risks as the diabetic, arteriosclerotic, cardiac and traumatic cases in shock. He reported 18 amputations in 17 patients. The paper was illustrated by remarkably fine moving pictures showing by actual procedure and diagrams the entire technique. Dr. Burgess discussed the medical aspects, Drs. Kingman and Gifford the surgical aspects and Dr. Miller the relation to general anesthesia. Dr. J. Kelley and Dr. Pickles also discussed the paper.

The meeting adjourned at 10:15 P. M. Attendance 72. Collation was served.

Respectfully submitted

PETER PINEO CHASE

Secretary

### PAWTUCKET MEDICAL ASSOCIATION

The following is the report of the annual meeting of the Pawtucket Medical Association, held at the club house of the Pawtucket Golf Club on March 24, 1927.

Following an excellent dinner, the meeting was called to order.

Dr. Byron U. Richards read the annual report of the treasurer, which was approved and ordered placed on file.

Dr. Lester J. Gilroy read the annual report of the secretary, which was approved and ordered placed on file.

The retiring president, Dr. Stephen A. Kenney, gave his annual address, urging better attendance at the monthly meeting and a more active interest on the part of each member towards the association.

The principal speaker of the evening was Judge Frank E. Fitzsimmons of Lincoln, who gave a very interesting talk on "General Welfare."

Dr. H. G. Partridge, president of the Rhode Island Medical Society, brought the greetings of



the state society and also urged a better attendance at meetings.

Other speakers were: Dr. Frederick V. Hussey of Providence, Dr. Arthur V. Jones of Providence, Dr. Julian A. Chase of Pawtucket, Dr. Charles H. Holt of Pawtucket.

The officers elected for the ensuing year were: President, Dr. Robert T. Henry; vice-president, Dr. George E. Ronne; secretary, Dr. Lester J. Gilroy; treasurer, Dr. Byron U. Richards; delegates to Rhode Island Medical Society, Dr. P. W. Hess, Dr. Charles F. Sweet; library committee, Dr. Earl J. Mathewson, Dr. Frank Lutz, Dr. Harry Triedman; new member of standing committee, Dr. Stephen A. Kenney.

There were thirty-three who attended the annual dinner.

L. J. GILROY, *Secretary*

## HOSPITALS

### THE MEMORIAL HOSPITAL

The following is a copy of the minutes of the Staff meeting held at Memorial Hospital April 7, 1927.

"Meeting called to order at 9:15 P. M. Records of previous meeting read and approved. Record of attendance taken. Eleven members and one guest present. Report of Surgical Service read by Interne. Report of Medical Service read by Interne. Report of Orthopedic Service read by Dr. H. E. Harris.

"Drs. E. S. Wing, F. V. Hussey and H. E. Harris were appointed as a Committee to draw up a resolution regarding the death of Mr. L. B. Goff, President of the Board of Trustees.

"Dr. J. F. Kenney reported a case of Aortic Aneurism which had been diagnosed as Medeaastinal Sarcoma.

"Dr. E. S. Wing reported a case of a granular blood disease.

"Dr. C. C. Dustin, guest of the evening, read a very interesting paper on 'Colitis.' Discussion by Drs. E. S. Wing, B. Houston and P. Batchelder.

"Adjourned at 10:25 P. M."

JOHN F. KENNEY, M.D.  
*Secretary, Memorial Hospital Staff*

## ANNOUNCEMENT

### SUMMER CLINICS, CHICAGO MEDICAL SOCIETY, 1927

Announcements and schedules will soon be ready for the 1927 Summer Clinics of the Chicago Medical Society, supported by many of the largest hospitals in the city, among them being the Post Graduate Hospital, Chicago Memorial Hospital, University of Illinois College of Medicine, Cook County Hospital, Michael Reese Hospital, Mercy Hospital, Presbyterian Hospital, Jackson Park Hospital, St. Luke's Hospital, Ravenswood Hospital, Mount Sinai Hospital, Francis Willard Hospital, West Suburban Hospital, Evangelical Hospital, North Chicago Hospital, Chicago Lying-in Hospital, St. Joseph Hospital, Alexian Brothers Hospital, Laboratory of Surgical Technique, Washington Park Hospital, Jackson Park Hospital, Chicago Municipal Tuberculosis Sanitarium, John B. Murphy Hospital. Several of our large laboratories have also agreed to co-operate with us in this great work.

In 1926 we limited registrations to physicians living in Illinois, but our increased facilities make it possible to accommodate many more than last year. Registrations therefore will be open to physicians from other states and to as many as may be accommodated, in the order of their registrations. Registration fee will be \$10 for each two weeks' course, payable at time of registration, and a physician may register for only one course of two weeks.

Admission will be by card only, issued by the Chicago Medical Society and no registration card will be issued until registration fee is paid.

The first two weeks' course will begin on Monday, June 13th, 1927, at 9 a. m., ending Friday, June 24th.

The second two weeks' course will begin on Monday, June 27th, at 9 a. m., ending Friday, July 8th.

This is an excellent opportunity for the medical men of the country to obtain real post graduate work in some of the best hospitals in the world, and from some of the best clinicians found anywhere.

Schedules will be sent to the 10,000 physicians in Illinois, and announcements will be sent to the American Medical Association, and the several state medical journals.

Last year our registrations closed one week after the first announcement.



## BOOK REVIEWS

EYESIGHT CONSERVATION, Council of America, Bulletin 7.

A concise yet elaborate compilation of interesting and important data in a survey that should be read by all teachers and others in business life to whom the economic value of good eyesight must appeal.

While reference is made to the large class of accidents that must result from defective vision on the part of drivers of motor vehicles, still greater emphasis should be laid upon the necessity for state legislative action in providing for an ocular examination by a competent authority of all applicants for a driver's license.

Chapter 6 commends itself most strongly. While legislation in many states and the rules of many industrial organizations demand the use of goggles on the part of employees when engaged in hazardous occupations, great carelessness and disregard for their value at such times is observed.

A system of inspection is therefore urged while the glasses themselves should be well adjusted and free from all sources of discomfort.

The chapter on *Illumination* is most exhaustive. The lighting of our schools as well as our homes can be most effectively carried out if the details here presented are adhered to.

While in the case of modern school buildings expert advice is provided for the establishment of suitable illumination, a large percentage of representative homes were found most insufficiently lighted.

On the whole the survey offers the best résumé of scientific knowledge pertaining to the conservation of eyesight and is presented in a most readable form.

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SIXTY YEARS IN MEDICAL HARNESS, by Dr. Charles B. Johnson. New York Medical Life Press, Publishers.

Pull up your chair before the fireplace and light your pipe. Dr. Charles B. Johnson is to tell us of his experiences of "Sixty Years in Medical Harness." He was born in 1843 and during his life-time saw ether adopted for operations, the germ theory of disease established, and public health become a part of the community conscience. As a hospital orderly in the Civil War, he made

his choice of career, and at the University of Michigan began his medical course. Instruction in medical schools was solely by lectures and demonstration clinics. To supplement this the student associated himself with some practitioner and accompanied him on his calls. The life of a practitioner on the prairies of Illinois is described in detail. Horseback was the only feasible means of getting around. Obstetrics in the country, outbreaks of typhoid fever and of malaria, and later "grip," and told in leisurely fashion. Dr. Johnson's circle of acquaintance was wide, and his memory for names and details of personality quite remarkable. For fifty years he was a member of the Champaign County Medical Society; its secretary for ten.

One should not expect a briskly moving narrative or the sequences always strict; for the story is written rather in a conversational way with repetitions and asides. As a picture of life of a county practitioner in Illinois from 1865 to 1925, it is interesting.

---

### NURSERY GUIDE

By Louis W. Sauer, Ph.D., M.D.

Second Revised Edition

C. V. Mosby Company, Publishers, St. Louis, Mo.

This book begins with pre-natal period and covers the early years of childhood including the pre-school child. The first chapter describes the many ailments of the early months with enlightening information on the teething period; in the chapter on "Artificial Feeding" both physician and layman can learn much regarding milk and its preparation; and section on the common ailments and care of the sick infant are concise and well handled and the whole book is well written, and should prove a practical aid both to the practitioner and the layman seeking information on the care of children.

---

### TEXTBOOK OF PHYSIOLOGY

By Prof. William D. Zoethout.

Second Edition, 1925

C. V. Mosby & Co., Publishers

William Zoethout is the professor of physiology in the Chicago College of Dental Surgery and in

the Chicago Normal School of Physical Education. Through his experience in teaching at these institutions he has gained a clear picture of what is demanded by the student who requires much more than a rudimentary understanding and yet does not need an exhaustive knowledge of physiology. In his "Textbook of Physiology" he has obviously kept his audience in mind, and has succeeded in producing a work which should be ideal for his chosen public.

This book should also appeal to a further group. The busy practitioner of medicine or the specialist devoting most of the time to be spared for reading to strictly medical literature will find this easy reading and of considerable profit. All physicians would do well once a year at least to read some book covering the field of one of the fundamental sciences on which the art of medicine is based. The doctor too often finds his perspective shortened by the constant application to the specific problems of therapy, the forest is not seen for the trees. The longer one is "out" of medical school the more valuable are these "reviews." When undertaken, the reading is a pleasure, it is easy and a relaxation from the articles of the professional journals because less technical and of greater continuity. The new advances and forgotten bits in these fields drop in place with a click and prove of surprising value in giving a perspective on the immediate problems of daily practice. A program of one such book a year is not too much to ask. Say one starts with a biology, the next year chemistry, the next physiology, then anatomy, serology, theories of infection, etc.—in no great time it will be found that the skeleton on which the specialized knowledge of medicine grows is losing its brittleness and being perpetually rejuvenated. Of this type of reading Prof. Zoethout's textbook is an excellent example.

The work is based on the cellular structure of the body and the book develops logically on that basis. There is first a thorough discussion of protoplasm and the metabolism of single cells, then of specialized cells. This leads naturally to their chemical activities. This lays the ground work for an excellent chapter on ferments. There then follows a discussion of cells as organized in tissue, and in sequence the cells as they function as specialized organs and systems. At various strategic points are chapters concerned with the

inter-relation of the organs studied, i. e., various phases of metabolism.

The sentence structure and vocabulary is concise and clear. The paper and type make it easy for the eyes. The illustrations are clear and for the most part diagrammatic. Conflicting theories are not too deeply discussed, the accepted one being more particularly elucidated, but at such points there are always copious references to the authorities in such a way that they might easily be looked up.

A few evening hours devoted to the 600 pages of Zoethout's "Textbook of Physiology" may well not only be a pleasant relaxation, but a definite restorative to one's fading memories of this most fascinating of medical subjects.

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#### INTERNATION CLINICS

Volume I. Thirty-sixth Series, 1926

Philadelphia and London

J. B. Lippincott Company

There are a number of valuable articles in this number dealing on diagnosis, treatment, electrotherapy and surgery. Of particular interest are those of Massive Collapse of the Lungs and of the treatment of Metasyphilitic Disorders of the Nervous System with Infectious Diseases. This collection of papers ends with a Progress of Medicine by H. W. Cattell and James Coupol and a recent progress in surgery by D. Balfour.

The reading of this volume keeps the general practitioner up to date on subjects which are of daily importance both from a practical and to a less extent from a theoretical point of view.

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#### MISCELLANEOUS

##### INFLUENZA DEATHS PASS PEAK, SAYS LEAGUE OF NATIONS REPORT

Deaths from influenza in Europe, where in recent months there has been an epidemic of that disease, have evidently passed the season's peak, according to statistics given in the monthly epidemiological report of the League of Nations' health section. This report has just been received

here by the League of Nations Non-Partisan Association.

The high point of the outbreak was reached in January in the countries most severely affected, the highest death rate being at Geneva, in Switzerland, where there were 129 influenza fatalities per 100,000 inhabitants between December 5 and February 12. This figure is almost equal to Geneva's annual tuberculosis mortality.

In 1924, there was a widespread prevalence of influenza, both in Great Britain and on the Continent, but in the last two years there has been little of this malady in those parts of the world. The present epidemic has followed pretty closely the rise-and-fall curve of the more serious outbreak of 1922.

Last autumn considerable apprehension was caused in Europe when influenza, though of mild form, was reported in evidence earlier than usual in the season in several countries. English towns were sufferers in October and November. Then Paris was visited by a siege of the disease early in December. Deaths from all causes in that city increased from 1,077 during the last decade of November to 1,834 during the second decade of December; then a let-down came. At the same time influenza was dominant at Lille and elsewhere in northeastern France. Later, the southeast was affected, the general mortality in Lyons rising to 34.8 per 1,000 inhabitants.

Germany suffered less than Switzerland and France. The highest figures reported in the former country covered the last week in January, when 444 influenza deaths occurred in 46 towns of more than 100,000 population.

Great Britain was attacked by the disease later than neighboring countries on the Continent. London mortality returns first reflected the epidemic in the initial week of January, when 128 influenza fatalities occurred, compared with 37 in the previous week. These deaths in London increased to 492 in the week ending January 29. Thus the epidemic was worse than in 1924, when the high number of flu-deaths was 310 in a week. But it was less severe than in 1922, when 781 persons died from influenza in the metropolis in seven days.

London figures show a typical old-age prevalence, the proportion of deaths among elderly peo-

ple being about the same as in 1924. In 1927 the age distribution of influenza mortality in the British capital was as follows: 65 years and over, 43 per cent; 45 to 64 years, 30.3 per cent; 15 to 44 years, 19.4 per cent; under 15 years, 7.5 per cent. Throughout Europe in the current epidemic chiefly persons beyond middle age have succumbed.

Other English towns affected were Brighton, where the general death rate was 39 per 1,000 in the high week; Bristol, where the rate was 3.1; and Nottingham, where it was 36.2.

Norway and the Netherlands had high influenza rates during the cold months, about twice as large as in the previous winter. Spain had a mild outbreak, with Madrid suffering most. Denmark reported 139,733 cases in January, or 4,500 more than in January, 1922. Poland, Austria and Italy were lightly affected. Czecho-Slovakia had 63,338 cases in the week ending February 12, with 336 deaths, children being largely afflicted. Hungary was hit by the epidemic in January, the general mortality rising to 24.8 in the final week, against 14.5 in the same week of 1926. In Greece the malady was widely existent, but usually in mild form. The same was true of Bulgaria.

In the United States there was no unusual prevalence of influenza during the past winter. For the whole country 1942 cases of the disease were reported in the week ending January 8, against 1,718 in the same week of 1926. But in subsequent weeks the existing cases of this country have been fewer than in corresponding weeks last year.

Without suggesting any relationship between the earlier epidemics of the Far East and the European outbreak, the League of Nations' report recalls that influenza spread itself during last June, July and August through the interior of China from Mongolia in the north to Yunnan in the south, and that an epidemic occurred in New Zealand, reaching its maximum late in July.

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#### BRINGING SCHOOL CHILD UP TO NORMAL WEIGHT

Having decided that underweight children are not the result of fate, Newton, Mass., proceeded



to bring to normal the weight of the school children in the city. The work was based on interesting the children in their own health and weight. After all physical defects, revealed by examination, had been corrected, steps were taken to increase weight.—*Hygeia*.

---

### MATERNITY WEAR MAY NOW BE BECOMING

Women need no longer deprive themselves of their customary occupations and recreations and virtually remain in retirement during pregnancy because poorly adapted garments emphasize instead of concealing increasing girth, says Dr. Belle S. Mooney in *Hygeia* for October.

Hygienic demands for maternity wear differ but little from healthful dress for any other time and condition. Health requirements for dress are that it should be light in weight, porous in weave, devoid of tight bands or restrictions of any kind at any place on the body and of warmth to be dictated by the weather.

Health experts advise a light porous cotton garment for wear next the skin and for outer wear a woollen garment of sufficient weight to protect against the cold. For maternity wear the union suit of knitted wear is most desirable. Clothing should hang from the shoulders and hoisery should be supported below the knee.

As walking is a most healthful exercise for the pregnant woman, foot discomfort should not be allowed to interfere with its daily practice. Shoes should be broad toed with a low, flat heel, giving natural support to the arches. The question of corsets or other support should be decided by the physician. Under normal conditions no corset is needed, as nature has provided a remarkable support in the muscles of the abdominal wall, which is sufficient to meet the demands of normal pregnancy and is far superior to any kind of corset that can be made.

Clothing is now made in every style, texture and color and with provision for the changing figure, so that the modern woman may purchase pretty, becoming shoes and clothes for maternity wear without sacrificing comfort or health.

### QUALITY AS IMPORTANT AS AMOUNT OF SLEEP

The need for sleep varies from one person to another, children whose growth is very rapid requiring more sleep than the average child of the same age, says Dr. Max Seham in *Hygeia* for October. Girls, especially during maturation, require more sleep than boys. More sleep is needed in winter than in summer. The child in the primary grades needs a minimum of 12 hours of sleep. No child between 12 and 14 years should have less than nine and one-half hours of sleep.

The quality of sleep is also important. Noise, excitement, irritating music and strenuous play before retiring induce a state of emotional fatigue which interferes with falling asleep and is associated with fear and night terrors. Crowded sleeping quarters and bad ventilation are also disturbing to sleep.

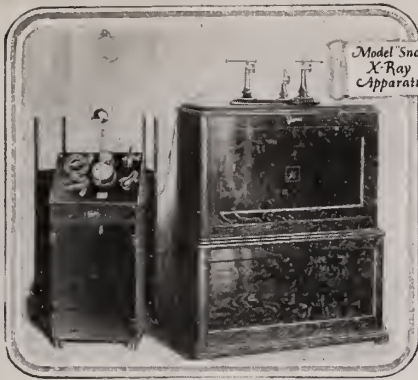
If two children must share one room, a separate bed should be provided for each of them. They should retire at the same time, or else care must be taken so that the one retiring later does not disturb the sleeping one. Improper food, especially if eaten a short time before going to bed, robs many a child of his needed sleep.

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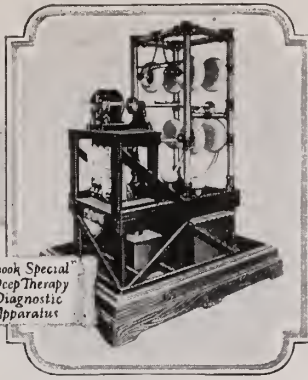
### 50 PER CENT OF COLLEGES GUARD STUDENT HEALTH

About 50 per cent of the colleges are doing something to care for the health of the students, says Dr. D. F. Smiley, medical adviser at Cornell University, in the October *Hygeia*. Certain wholesale sanitary measures, such as filtering and chlorinating the university water supply, pasteurizing or certifying the milk supply, examining the food handlers, accrediting and inspecting the rooming houses, providing hygienic classrooms, eating commons and dormitories form part of this work.

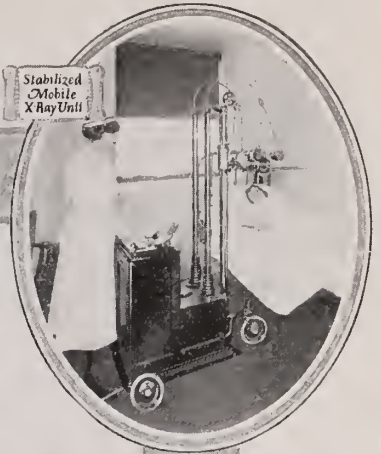
Another part consists in providing courses in hygiene, biology, physiology and anatomy; organized sports and athletics, and an efficient health service. The function of this service is not only the care of sick students, but the examination, care and training of healthy students. Prevention has taken precedence to cure in the colleges as in other communities.



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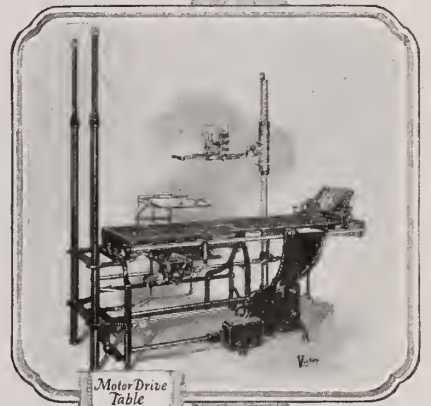
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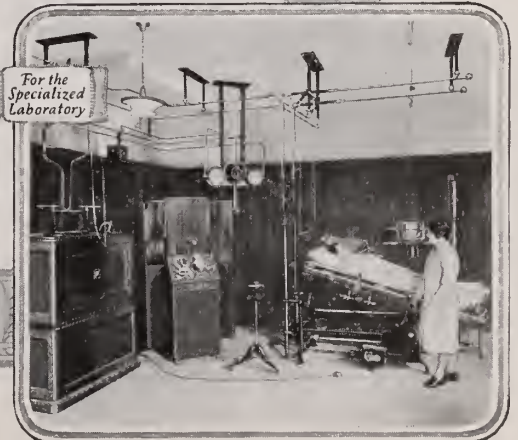
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# THE RHODE ISLAND MEDICAL JOURNAL



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## ORIGINAL ARTICLES

### CONSERVATION OF EYE-SIGHT

BY

DR. HARRY C. MESSINGER

PROVIDENCE, R. I.

Scientific medicine is progressive, its field is vast; even within the past few years, not only men of research, but practitioners have new conceptions of pathological processes and new ideas of treatment. Compare your present understanding and methods of treatment of diabetes, heart disorders and goiter with the knowledge and means of twenty years ago. The practitioner of today, with the help of specialists, quickly available, can deal intelligently with conditions which twenty years ago were to a great degree beyond his control.

In ophthalmology, progress has not in the last two decades been striking, but in the efficient care of the eyes and conservation of sight there has been and there will be progress. New ideas in medicine, such as focal infection, localization of brain-tumors, the study and care of inflammatory diseases of the nasal accessory sinuses, new drugs, the wider use of the electric ophthalmoscope, have broadened the scope and application of ophthalmologic knowledge. What once was known only to the trained specialist is now more generally understood; ophthalmic efficiency has increased.

The importance of conservation of vision has appealed to thinking men and women, both in and out of our profession; as for instance, The National Committee for the Prevention of Blindness, which a year ago had 10,000 members and now has 16,000, and the Eye Conservation Council of America, from whom I procured the slides I shall show you in a few minutes. The object of these organizations is to disseminate knowledge of methods of sight conservation and stimulate inter-

est in the subject. Both organizations realize that the objective is best attained by education, aided in some instances by legislation.

In Providence, for nearly twenty years, school-children have been examined for defective vision, parents advised to take them to oculists for correction of defects, and in cases where they were too poor or indifferent to follow this advice, examination by medical men has been provided. This has been a service of value, not only to individuals but to the city. I know of boys who have left school at the earliest possible age with the idea that they were poor scholars, mentally inferior to others, when the truth was they did not do well in school because what was written on the black-board was like Greek to them, or because continued reading gave them headache or restlessness from eye-strain. This service is much more efficient in Providence than in the country at large (thanks to Dr. Chapin), although something like thirty-eight states have legislation on the matter.

About 16% of all industrial accidents are eye accidents, and their prevention is a very important part of the conservation of eye-sight. I once knew a man named Patrick Burns, who worked in the grinding room at the Nicholson File Company. Each night before supper his wife instilled cocaine and with the point of a pen-knife went over both eyes digging out any emery she could find. His corneae were well spotted, the recurrence of actively inflamed ulcers was not enough to break up that practice. The cocaine felt "good" after a hard day at the wheel. Even the Harrison Act has helped conserve sight.

About 16% of the total blindness in the United States is due to accident. Many of these accidents are preventable by the use of goggles, better illumination of factories, etc. Proper illumination is very important also in the prevention of eye-strain. Some of our modern lights are very powerful; such lights produce glare on polished surfaces; the light should be properly diffused. Daylight has no perfect substitute.

The general practitioner has done much in the prevention of blindness; the use of the Crede

\*Read before the Rhode Island Medical Society, Dec. 2, 1926.



method of instilling silver nitrate at birth is general, not only because of law, but from the example in teaching of doctors everywhere. Mothers of cross-eyed children are no longer told to wait until they are older, but are referred to the oculist. The Public Health Service of our country is fighting trachoma, which is still more or less prevalent.

With regard to hospital care of eye patients: we now have more hospitals, better equipped than formerly, and our out patient departments also, have much better equipment. BUT we have in this state very few beds reserved for eye cases. Our clinics could be much better. There is this difference between eye cases and most others. The most important eye cases may be walking about. One may step into the out patient department or into the office of any of us. In my opinion the Senior Members of the Visiting Staff should be present at our patient clinics, should see most of the new cases and any important case: this would assure the attention of an experienced man and also, should the case be referred to the House, the surgeon will know it, will have personal touch with it, and know why it comes to the House. The out-patient man, even the new externe, should visit the House with the Senior, he should have the advantage of following the case to its in-treatment, laboratory findings, etc. At present our out-patient clinics are small, or, if larger, are undermanned.

In the hospital, eye patients should be in a separate ward or pavilion and have nurses whose only duty is to care for them. The eye patient is apt to be quiet, uncomplaining, yet inattention to details of treatment may result in disaster. Disaster or failure to him is loss of sight, yet between a pneumonia case and a case of glaucoma, the pneumonia man, to the nurse caring for both, is evidently sick. He may die, perhaps in an hour: the eye patient is all right, he looks healthy, perhaps cranky about the pain in his head. We are not afraid he'll die, but we do not care to have him spend his declining years selling shoelaces in front of Grace Church, with an "I am Blind" sign hanging about his neck. A small operating room reserved for eye cases is also important. Infection after an eye operation is a serious matter. Eye wounds cannot be protected, as are abdominal wounds for instance, from secondary infection, or

the field so thoroughly sterilized before operation: we cannot afford the slightest preventable risk of infection at the time of operation. Repair will take place, but possibly at the sacrifice of vision—failure again. I prophesy for our State in the future an efficient public clinic and segregated eye pavillion, probably not a separate institution, but a part of one of our hospitals.

Every branch of medicine has its contacts with ophthalmology. The eye is an optical instrument, often imperfect structurally, and made, not of glass and wood, but of living tissues, delicately though rather ruggedly constructed. Advance in this specialty at present means the more practical use of what we already know.

Conservation of vision is important for humanitarian and economic reasons. Give the ophthalmologist a chance at any child who is cross-eyed, scowls, keeps rubbing his eyes, who does not progress as he should in school. Give him and the child improved hospital facilities, and above all, educate the public that the ever increasing demands of modern life on the sight-organ can only be met by widespread use of all conservation methods.

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## AUTONEPHRECTOMY\*

BY

VINCENT J. ODDO, M.D.

PROVIDENCE, R. I.

*Value of Pyelography and Report of Five Cases  
From the Urological Department  
St. Joseph's Hospital*

Autonephrectomy has been described as a primary enclosed tuberculous involvement of all or a portion of the kidney, with or without a superimposed mixed infection, and with a ureter and pelvis either closed or patent.

In 1915, Caulk reviewed the literature very thoroughly and reported seven cases. In 1921, he reported sixteen other similar cases. He showed that spontaneous healing never takes place in a tuberculous kidney.

The most comprehensive study however, was made by Player and Redewill in 1926. They

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\*Read before the Rhode Island Medical Society March 3, 1927.

divided the various pathologic lesions found in autonephrectomy into the following classification. They are listed in the order of frequency:

- (1) Ulcero-cavernous tuberculosis,
- (2) Tubercular pyonephrosis,
- (3) Tubercular atrophic sclerosis,
- (4) Tubercular hydronephrosis.

These latter authors state that autonephrectomy is always a primary tubercular infection, and that a case has never been reported in which pyogenic organisms were the sole causative factors in the walling off of the kidney with the pelvis and the ureter for any period of time. This statement is in variance to our experience, and I will demonstrate today one case in which a tubercular process could not be found after a very careful study by our pathologist Dr. James Hamilton.

Pyelography in autonephrectomy helps us not only to visualize the transformation which has occurred in the kidney and ureter, but also, what operative procedure to adopt should nephrectomy be indicated. At the onset of a kidney infection pyelographic study is negative, but after the process has continued for a long period certain changes occur. It is possible to see for example, strictures, dilatations, kinks and calculi in the ureter, and also whether the ureter is permeable. If patient have a calculus in the ureter and nephrectomy be performed, it is necessary to remove the calculus.

The changes which take place in the kidney pelvis are those of a chronic kidney infection and are influenced by an obstruction in the ureter.

Some show contraction and obliteration of the pelvis as in one of my cases; others a pelvis filled with calculi, but the largest number present a pelvis which is dilated, deformed, with obliteration of the calices, and often showing cavitation. In anomalies of the kidney a pyelograph of the normal side aids us in locating the exact position of the diseased kidney. I shall report one such case today.

I desire to report now five cases which exemplify in my opinion forms of autonephrectomy.

CASE (1) Miss A. B. age 20, admitted December 5, 1921. Record No. 2263. Referred by Dr. W. R. McGuirk.

Complaint: Marked frequency, urgency, and pain in urination. History of the case brought out the fact that in childhood the parents noticed that

she voided very often, and that she had seen at irregular intervals, blood and calculi in the urine.

Physical examination: On palpation great tenderness over the bladder region. In the urine were found many red blood cells but no tubercle bacilli.



PLATE (1)

Case (1) Calculi in the left and right kidneys. Calcification of the right ureter.

The combined intravenous phthalein test showed 10% of the dye was excreted in one hour. Cystoscopy under slight general anesthesia gave these findings: the vesical sphincter was markedly dilated; many calculi were seen on the bladder floor; chronic cystitis; the right ureteral orifice was large, funnel shaped and did not show any contractions of the ureteral sphincter. The left ureteral orifice was also very large, and was surrounded by an intensely congested mucosa which in turn was covered by muco-pus. The right ureter was catheterized for a distance of three inches but no urine was obtained. The left ureter could not be catheterized. Radiographs of the urinary system before the cystoscopy showed the following: calculi in the bladder, the left kidney, the right kidney, the right ureter, and calcification of the right ureter.

Diagnosis: paralysis of the vesical sphincter, chronic cystitis, vesical calculi; calculi in and progressive destruction of the left kidney; autonephrectomy of the right kidney; calcification of the right ureter. The right kidney in this case was completely walled off and totally destroyed. The patient died two weeks later without operation.

CASE (2) Mr. O. V. Age 65; admitted February 10, 1923. Record No. 5255.

Complaint: for a period of eight weeks has had pains in both kidney regions, both abdominal and lumbar, radiating to the bladder, accompanied



PLATE (2)

Case (2) Showing atrophy of the left kidney pelvis.

by the appearance of bloody urine; frequency in urination. The patient has complained of a lumbar discomfort in the regions of both kidneys for many years.

Physical examination: on palpation neither kidney could be felt, but the left nephritic region was tender. The combined kidney test with phthalein given intravenously was 50% for one hour.

Cystoscopy: the bladder was normal; there was a small diverticulum behind the left ureter; both ureters were easily catheterized; the left ureteral orifice did not show contractions. Urine was obtained from the right side but none from the left. In the differential kidney test with phthalein given intravenously 45% was obtained from the right kidney but none from the left. A pyelograph of the left side showed a small contracted button shaped pelvis.

Diagnosis: diverticulum of the bladder, auto-nephrectomy of the left kidney, hypertrophy of the right kidney.

This is another case of total destruction of the left kidney with obliteration of the pelvis.

CASE (3) Mrs. L. V., age 47; admitted May 4, 1926. Record No. 752.

Complaint: for three months marked frequency and urgency in urination and blood in the urine at each urination.

Two years ago the patient began to suffer with pains in the left kidney which radiated across the abdomen to the right side. About one year ago, the pain in the left kidney became intense, radiated to the bladder and was accompanied with symptoms of acute cystitis.

The family history is of importance in that a daughter of twenty one has tuberculosis of the lung.

Physical examination: patient is fairly well nourished but says that she has lost considerable weight in the past year.

Palpation: there is pain over the left nephritic and bladder regions. The lower pole of the left kidney is palpable.

Cystoscopy: a very acute tuberculous cystitis was present. The right ureter appeared normal and emitted clear urine. The left ureteral orifice was ulcerated, the edges being ragged and deep. It did not contract: and about every five minutes flakes of pus oozed out. There were three large ragged ulcers between and posterior to the ureters and three small similar ulcers on the right wall of the bladder. Both ureters were catheterized and collections made. The right kidney specimen was



PLATE (3)

Case (3) Showing abscess cavity of the left kidney; enlarged pelvis and dilated ureter on the right side.

clear; the left showed a few cc of thick pus. An intravenous phthalein test was then given and in 15 minutes 20% appeared on the right side; none on



the left side. Tubercle bacilli were found in the pus from the left kidney. The blood examination gave 17,000 leucocytes.

Pyelography showed a large pus sac in the left kidney; a dilated ureter and distortion of the pelvis on the right side. Dr. James F. Boyd made a diagnosis of tuberculous kidneys.

A left nephrectomy was done and a tubercular abscess was present. This was a case of tuberculous pyonephrosis. Diagnosis: Autonephrectomy of the left kidney.

January 10, 1927. Patient has gained in weight, still has slight frequency in urination, and occasionally the urine is blood tinged.

CASE (4) Mr. D. I., age 36, admitted November 29, 1926. Record No. 2618.

Complaint: pain in the right anterior nephritic region and continual ache in the suprapubic area, accompanied by a diurnal and nocturnal frequency and urgency in urination. The patient's initial symptoms began about one year ago with pain in the right nephritic region, and soon there followed the above urinary symptoms.



PLATE (4)

Case (4) Showing the ureter crossing the spine to the pelvis situated at the right portion of the horseshoe kidney. The pelvis is dilated and the calices blunted.

Physical examination: the patient is thin and poorly nourished. Palpation elicited pain over the appendiceal and right kidney area and also caused a dull ache over the bladder region. The globus minor of the right epididymis was large, indurated, and painful. On rectal examination the

prostate and the right seminal vesicle were indurated. Urinalysis: albumin one plus, many leucocytes, red blood cells, and many acid fast bacilli. The combined intravenous phthalein test showed 35% in one hour.

Cystoscopy: there was a stricture of large size in the posterior urethra; the mucosa of the trigone and bladder was edematous and much congested, like a tuberculous cystitis; the right ureteral orifice appeared normal and was seen to contract and dilate. The left ureteral orifice was funnel like and did not show contractions of the sphincter; about every four minutes small flakes of pus oozed out. This orifice was surrounded by much congestion and edema, and above and behind it was an area of ulceration. The right ureter was easily catheterized, the urine was clear, and contained few leucocytes. Guinea pig inoculation with this urine did not show tuberculosis.

On the left side the catheter entered for a distance of one-half inch and then was obstructed, no urine was obtained. An intravenous phthalein test showed 10% was excreted by the right side, none by the left, in 15 minutes.

Pyelography of the right side showed two important findings: (1) a blunting of the calices; (2) the ureter crossed the spine and demonstrated the right kidney on the left side of the body to the left of the spine. From the character of the calices this kidney seemed tuberculous.

Diagnosis: tuberculous cystitis; incipient tuberculosis of the right kidney; autonephrectomy of the left kidney.

The left ureter could not be catheterized as I mentioned above, but as the right ureter crossed the spine to the left, I decided that the left ureter crossed the spine to the right. I operated, explored the right abdominal area but no kidney was found. On further exploration of the abdomen a horseshoe kidney was found situated completely on the left side of the abdomen to the left of the spine. The right portion of the horseshoe kidney was small and indurated; the left portion was large. In the examination the right lobe of the liver was found to extend below the crest of the ilium. The appendix was removed.

This case demonstrates very well a tubercular hemi-autonephrectomy of the left half with probable extension of this process to the right portion of the kidney. I did not perform a heminephrec-

tomy because I believed the prognosis would have been unfavorable.

Since the removal of the appendix the patient does not complain of pain on the right side of the abdomen.

CASE (5) Mrs. E. R., age 60; admitted April 12, 1926. Record No. 783. Referred by Dr. S. L. Beaudoin.

Complaint: pain in the left nephritic region and blood in the urine. The history of this case is interesting. One and one-half years ago the patient suffered with excruciating pain in the left



PLATE (5)

Case (5) Showing almost total disappearance of the kidney tubules; extensive formation of fibrous tissue; round cell infiltration, the glomeruli are slightly hypertrophic and the capsule thicker than normal.

kidney which radiated to the left thigh. She was operated upon by another surgeon for calculus in the kidney, but no calculus was found. Following the operation the wound became infected and drained for three months. As a result of this infection the patient developed a ventral hernia the size of a baby's head. This hernia receded on lying in the prone position and protruded in the erect posture. For one week before being admitted the patient saw blood in the urine several times. What disturbed the patient the most was the pain in the left nephritic region and ultimately the appearance of the blood in the urine. Six years ago patient had typhoid fever.

Physical examination: patient is short, fat and seems very tired. A large hernia is present over the left anterior nephritic area. The thickness of the hernial sac is very thin as the coils of the intestines can be seen and felt distinctly. Palpa-

tion through this area demonstrated a small, indurated, immovable and insensitive kidney which was fixed and firmly attached to the lumbar fascia.

The combined intravenous phthalein test was 45% Wassermann of the blood was negative.

Urinalysis: the urine was turbid, contained two plus albumin, a few leucocytes and occasional hyaline cast.

Cystoscopy: many small ulcers were present on the trigone, each surrounded by an area of hyperaemia. The rest of the bladder was normal. The right ureteral orifice contracted well and appeared normal. The left ureteral orifice was small and did not contract and dilate. The right ureter was catheterized, clear urine obtained, culture was negative. Culture of the bladder urine showed bacillus coli. The catheter entered the left ureter for a distance of one-half inch and became obstructed. No urine was obtained. In the intravenous phthalein test 12% was excreted by the right kidney in 15 minutes and none by the left.

The total leucocyte count was 9800.

Pyelography: the opaque fluid rose for about one inch in the left ureter. The ureter and pelvis on the right side were normal.

Diagnosis: autonephrectomy of the left kidney.

The kidney although small was removed with great difficulty. The adhesions were so dense about the kidney that the scissors were used very freely to separate it.

Laboratory report: by Dr. James Hamilton.

Specimen consists of a mass of tissue not unlike a kidney surrounded by fatty and inflammatory like tissue. The kidney is  $7\frac{1}{2}$  cm in length, 4 cm in width, and 3 cm in thickness. It is very firm and hemorrhagic throughout. On section the cut surface presents a pale yellowish appearance with a few scattered cysts filled with gelatinous material. The kidney tissue is uniform in consistency, and the normal kidney markings are not apparent.

Multiple sections were made for microscopic examination without any evidence being found of a tubercular nature.

This case is interesting because the pain in the left nephritic region was due to the autonephrectomized kidney, and the hematuria to ulcers on the trigone.

December 5, 1926. I was notified by the family physician that the patient had been free of pain



since the operation, and that she feels much stronger. Also that she has not passed any more blood in the urine.

A summary of the five cases is interesting:

They occurred between the ages of 20 to 65 years. Three were female and two male. The left side was involved four times, the right once. The kidneys were palpable twice cases No. (5) and (3).

One kidney case (5) showed perinephritic changes, probably because of a secondary infection. All the kidneys were small except case (3). They were all diagnosed during life except that the horseshoe kidney was overlooked in case (4).

The bladder showed evidence of tuberculosis in two cases, chronic cystitis in two, and in one case the bladder was normal.

The ureters were patent in two, and obstructed in three.

An important feature in case (3) is that in a seemingly bilateral tuberculosis of the kidneys, the patient improved both in symptoms and in physical strength, after the removal of the left kidney.

#### *Conclusions*

(1) In this series of cases autonephrectomized kidneys produced:

- (a) Pain in the kidney in 80%
- (b) Pain in the bladder in 80%
- (c) Chronic cystitis in 80%.

(2) The proper treatment is nephrectomy provided the prognosis is favorable.

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## THE SURGICAL INDICATIONS OF INFLAMMATORY DISEASES OF THE GALL BLADDER

BY

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The morbidity and mortality of the surgical diseases of the gall-bladder and biliary ducts can be lessened by the timely and judicious employment of appropriate operative measures. Guided by our clinical experience and a study of the English, French and German literature of the subject published during the last five years, it is my wish

to briefly discuss the indications for and the usefulness of operative treatment of inflammations of this organ. The rapid, permanent and complete cure of inflammatory diseases of the gall-bladder and biliary passages can only be secured by the aid of surgery. Medical treatment is palliative and valuable in the pre- and post-operative management of these affections. To furnish the occasional operator with safe indications for the performance of either of these two operations, cholecystostomy and cholecystectomy, is the sole object of this paper. Formerly, there was a tendency to extreme conservatism; surgeons were hesitant, and only badly diseased gall-bladders were removed. Nowadays, the reverse obtains, and, of the two operations, cholecystectomy is the more popular, the more frequently performed, and is said to be more often followed by complete and permanent recovery, and to do, when skilfully performed, the most good to the greatest number.

In inflammations of the gall-bladder, calculous or non-calculous, complicated or uncomplicated by disease of the neighboring organs, cholecystostomy and cholecystectomy have each their respective sphere of usefulness. No surgeon of experience employs either exclusively. Irrespective of the type of operation performed, a certain percentage of cases present post-operative symptoms. Some clinicians teach that a diseased gall-bladder is a potential menace, and should not be left in the abdominal cavity any more than a diseased appendix; others maintain that the gall-bladder should be left whenever possible, claiming that its ablation is a mutilation, and that it is a safe and sure guide to the common duct, should a subsequent operation on the bile tracts be necessary. After removal of the gall-bladder, exploration of the bile-ducts is attended with great difficulties.

Drainage of the gall-bladder is a safer and easier procedure in the hands of the average surgeon and in the average case. It is easy of execution, requires little operative skill, and, in desperate cases, is an emergency operation giving immediate relief, and is frequently life-saving. Many patients are so improved by an emergency or preliminary cholecystostomy that they, when their condition is stabilized, willingly and safely submit to further restorative operating or to the removal of their diseased gall-bladder. In fulminating cases, carry by drainage the acute gall-bladder to



the subacute or chronic stage, and remove it later if it becomes necessary.

Cholecystectomy removes completely from the body a focus of infection, and is usually attended by an earlier, more complete and permanent disappearance of symptoms. The advocates of cholecystectomy say that its end-results are as superior to cholecystostomy as those of nephrectomy for pus-riddled kidneys are better than those of nephrotomy. They further maintain that cholecystostomy is an incomplete operation because the retained gall-bladder is a potential source of future trouble, and is an important factor in stone production and in the persistence and recurrence of symptoms. The secreting glands and crypts in the lining membrane of the gall-bladder may be retention pockets of sediment, pus and bacteria.

An intelligent and profitable discussion of the subject calls for a knowledge of the important accepted and established facts known concerning the anatomy and physiology of the gall-bladder, and a brief review of the etiology and pathology of its inflammatory diseases.

The gall-bladder is not a useless, not a vestigial organ. Its routine removal is to be condemned. When diseased, if its restoration to approximately normal function and normal structure be probable, it should not be removed. If the gall-bladder is irreparably diseased, its removal is necessary. Formation anew of the gall-bladder never takes place.

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The relations (anatomical and physiological) existing between the gall-bladder and bile-ducts and the contiguous organs (first part of the duodenum, pyloric end of the stomach, liver, head of the pancreas, etc.) are intimate and important. Functional impairment and anatomical deviations of any or of all the constituent parts of the biliary system determine more or less biliary insufficiency and digestive disturbances. These lower vitality, entail invalidism, and predispose to, when they do not result from, calculous, inflammatory, neoplastic and other degenerative processes in the gall-bladder and related organs.

Anatomical and physiological integrity of the gall-bladder and bile-ducts (excretory and secretory parts of the hepatic system) is essential to the perfect physical state of the individual. Normal hepatic functions presupposed, among other con-

ditions, adequacy of the lumen of the cystic, hepatic and common ducts, and normalcy of the mucous membrane and musculature of the gall-bladder. The organ must be free from adhesions, and its motility and contractility unimpaired.

About the gall-bladder, extending beneath the serosa, and especially between the liver and gall-bladder, there is a layer of cellular tissue in which are situated lymphatic capillaries communicating with the lymphatics of the liver. In severe infections of the gall-bladder, this cellular tissue is infiltrated and oedematous. It is continuous with that covering the pancreas.

Connective tissue holds the gall-bladder in intimate contact with the under surface of the right lobe of the liver. The organ is further maintained in position by peritoneum covering fundus and under and lateral surfaces and continuous with the hepatic serosa.

The gall-bladder and bile-ducts are abundantly supplied with lymphatic vessels by which infection may be conveyed to and from the liver, to the head of the pancreas, and to other neighboring or remote organs. Many of these lymphatics pass through a lymphatic gland situated at or near the neck of the gall-bladder. Some of the efferent lymphatic vessels empty in glands near the head of the pancreas, others in glands near the hepatic artery.

The cystic duct at its junction with the gall-bladder forms a sharp letter-S kink. In certain pathological states, so efficient is the valve-like obstruction formed by this kink that either the gall-bladder or the common duct can be overdistended to bursting without affecting the pressure in the other. The mucous membrane of the cystic duct is continuous with that of the gall-bladder; it differs from it by being thrown into numerous valve-like folds (leaflets), the valves of Hester.

Anomalies in the caliber, number, length, mode of union, distribution and anatomical relations of the regional blood-vessels and bile-ducts are not uncommon. To disregard them is to invite operative accidents.

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As to the normal functional value and functions of this organ, there is a great difference of opinion. The bile undergoes in the gall-bladder modifications, physical and chemical, enabling it to better participate in the digestive processes. Nor-

mally the gall-bladder contains about 30 Cc. of bile; by virtue of the elasticity of its walls, it is capable of enlarging to a much greater capacity. It is an overflow chamber, a tension bulb, a safety-valve, as it were, protecting the liver cells from injury incident to excessive back pressure. Some clinicians claim that the most important function of this organ is to relieve pressure within the biliary ductal system.

The flow of bile into the duodenum is regulated by many factors, the rhythmic contractions of the gall-bladder, the respiratory movements, the milking action of the duodenal peristaltic waves, the passage of the acid chyme through the pyloric opening and active digestion. The gall-bladder and ducts are squeezed between the liver and the intestines by the contractions of the diaphragm and of the abdominal respiratory muscles.

Under normal fasting conditions, the sphincter of Oddi, when normal in tone, controls the bile pressure in the ducts. With the passage of food from the stomach into the duodenum, the sphincter at the outlet of the common bile-duct relaxes, the gall-bladder contracts, and the bile escapes into the intestine. As the sphincter of Oddi contracts, the gall-bladder relaxes reflexly and vice-versa (theory of contrary innervation).

The intra-duct bile pressure is dependent on the force of bile secretion and the resistance offered by the sphincter muscles at the ampulla of Vater. The liver secretes bile at about 300 mm. pressure of water, and the maximal contracting force of the gall-bladder, when under stimulation by electricity, is only 313 mm. Thus, it is seen that the maximal force of contraction exerted by the gall-bladder on its contents does not exceed materially the maximal normal intra-hepatic bile pressure.

The gall-bladder, owing to the poor development of its musculature, has low contractile or expulsive power; it cannot fully empty itself. Its smooth musculature has just enough tonus to prevent overdistension of the organ, and cannot and does not exert any particular pulsative pressure upon its contents. Hypertrophy of the gall-bladder wall is not caused by and does not follow obstruction (continuous or intermittent, partial or complete) of the cystic or common duct. This is in sharp contrast to what occurs under analogous conditions in other smooth-muscle hollow viscera.

During fasting, the gall-bladder fills with bile, adds mucus to it, concentrates it and otherwise modifies it. Gall-bladder bile is a thick, syrupy, viscid fluid, having about eight times the consistency of common-duct bile. This concentration of bile is brought about largely through water abstraction by the lymphatic vessels.

The gall-bladder secretes mucus. "The mucus it produces reduces the chances of pancreatic and other complications," Mayo. The bile from the hepatic duct being free of mucus can cause a more virulent pancreatitis than gall-bladder bile, which under normal conditions always contains mucus.

Permanent dilatation of the bile-ducts and larger biliary radicles follows, as a rule, the permanent loss of gall-bladder function through atrophy, disease, such as long-continued chronic cholecystitis, distension of the gall-bladder with calculi, complete occlusion of cystic duct, etc., or removal of the gall-bladder. Animal experimentation, operative, post-operative and post-mortem findings have repeatedly confirmed the preceding statement. This dilatation is expressive of nature's effort to compensate for the loss of the gall-bladder. The stump of the cystic duct participates in this distension. That this permanent dilatation of the biliary ducts is of permanent harm to the individual has not been demonstrated. As a matter of fact, it presents no characteristic symptom-complex.

Though in some of the lower animals the gall-bladder is absent, though in man it is not a vital organ, as evidenced by the many patients in whom its removal has not been followed by any serious disturbances, we are firmly convinced that it is an important organ and a factor in the well-being of the individual. The body, by its power of adaptation, compensates for the loss of the gall-bladder. If the bile-ducts are patent, if the flow of bile into the duodenum is free and unimpeded, cholecystectomy does not permanently impair health, does not interfere with nutrition, does not shorten life, but it has been noticed that in 60 per cent. to 70 per cent. of cases in whom the gall-bladder has been removed, there is either a diminution or a suppression of the gastric secretion of HCl. In many of these cases, the HCl deficiency antedates the operation. I have patients whom I cholecystectomized over ten years ago, and who have since been in normal health.



After removal of the gall-bladder, the biliary pressure equalizes or overcomes the resistance of the sphincter of Oddi. Bile secretion is more or less continuous, and after a cholecystectomy, its excretion into the duodenum is at first also more or less continuous, and pure bile may appear in the stool this is abnormal).

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Next to the appendix vermiformis, the gall-bladder is the most frequent seat of abdominal morbidity. The intimate anatomical contacts and the close interrelationships (nervous, vascular, lymphatic) existing between the gall-bladder and biliary ducts and the contiguous abdominal organs determine in a large measure the incidence, progress and distribution of disease in this region, be the disease calculous, obstructive, inflammatory or neoplastic in nature.

Inflammatory processes (especially those of low virulence) of the gall-bladder may initiate, and, in fact, are frequently associated with gall-stone formation. Cholelithiasis is most always preceded by or associated with an infective inflammation of the gall-bladder. Bacteria (staphylococci, streptococci, typhoid, paratyphoid, colon bacilli, etc.) have been found in biliary calculi, have been found etiologically associated with cholecystitis. An infected gall-bladder is capable of receiving infection from and distributing infection to contiguous and remote organs. Chronic septic infection from the gall-bladder may cause infective arthritis, fibrositis (muscular rheumatism), to say nothing of the more remote, but, nevertheless, important noxious effects upon the heart and blood-vessels. The gall-bladder may be reinfected; it may reinfect itself. Thus is explained, in many cases, the recurrence and persistence of symptoms.

Infective microorganisms migrate to the gall-bladder through the common and cystic ducts, through lymphatic vessels, or through the blood stream (hepatic artery, cystic artery, portal system). Inflammation may spread to the gall-bladder by continuity of tissue: enteritis, duodenitis, choledochitis, cholecystitis; may spread to it by contiguity of tissue. Microbes gathered from the intestines by the portal system filter through the liver, and may be carried in the bile to the gall-bladder via the hepatic and cystic ducts. Infection gaining entrance from the intestines into the por-

tal circulation may reach the gall-bladder by means of the numerous lymphatic vessels that pass from the liver to the gall-bladder; may ascend from the duodenum through the lymphatics in the walls of the common duct. Thus is explained the frequent co-existence of cholecystitis with appendicitis, with typhoid fever, with colitis, and with suppurative hemorrhoids.

Enlargement of the lymph nodes along the common duct is good evidence of gall-bladder infection. "A seriously infected gall-bladder cannot exist without evidence of infection in the glands which drain it" (W. J. Mayo).

The frequent co-existence and association of cholecystitis and choledochitis with an hepatitis most marked in the immediate neighborhood of the gall-bladder, with acute and chronic pancreatitis is most always due to infection propagated by the lymphatic vessels. Many cases of pancreatitis follow cholelithiasis and cholecystitis. Cholecystitis may also be due to a direct extension of inflammation by way of the lymphatics from a liver already inflamed (Ewarts Graham). The not uncommon simultaneous occurrence of duodenal ulcers and cholecystitis furnishes further proof of lymphatic-borne infection. Some clinicians claim that 10 per cent. of duodenal ulcers are accompanied by cholecystitis. Pyaemia excepted, every infection is a lymphangitis.

Bile stasis is a potential predisposing factor to gall-bladder disease and to gall-stone formation. Stagnant, stringy, viscid, tarry bile is evidence of pathology. Stasis is a factor in appendicitis, in inflammations of the urinary bladder, and apparently plays an analogous etiological role in inflammations of the gall-bladder. Stasis is more common in women because of pregnancy, tight clothing, constipation, sedentary life, lack of fresh air and exercise. Impairment of the elasticity, contractility or motility of the gall-bladder, partial or complete occlusion or obstruction of the bile-ducts impede the free flow of bile, predispose to bile-stagnation, to bile concentration, to bile disintegration, increase the bile pressure, and invite bacterial infection. Even those who attribute gall-stone formation to hypercholesterinaemia do not deny the etiological importance of stasis and infection.

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Acute, subacute, chronic or recurrent inflammatory processes of the gall-bladder and bile-ducts



are either local or diffuse. Gall-bladder disease is often merely part of an infection involving other organs in close proximity. Here, as elsewhere, infective inflammation (primary and secondary) spreads by continuity or contiguity of tissue, is transmitted through vascular or lymphatic channels, and, gall-stone formation being excepted, resembles in inception, evolution, termination and sequelae infective inflammations occurring in other hollow viscera. The various pictures presented correspond to the different phases, to the different stages of inflammation. Each succeeding attack of cholecystitis causes additional degenerative changes in the already structurally altered gall-bladder. Grossly pathological gall-bladders are usually found in later life. Autopsy records, operative findings and clinical observations furnish abundant evidence of the very slow progression of most lesions of the biliary tract.

Gall-stones frequently accompany inflammatory (infective) processes of the gall-bladder and bile-ducts, are usually secondary to them, act like infected foreign bodies, and play an important etiological role in the lodgment, persistence and transference of infection. "Gall-stones are found in approximately 70 per cent. of all cases of gall-bladder disease" (Mayo). Though a by-product, they often initiate and more frequently keep up, complicate and aggravate gall-bladder disease. By their mechanical presence, they can cause tissue necrosis and perforation. Gall-stones vary in origin, shape, size, number, chemical composition and location. They may lodge and remain latent in the gall-bladder, may migrate down the cysticus and the common duct, and then escape into the intestinal canal, or may become impacted in a diverticulum, in the neck of the gall-bladder, or in any part of either the cystic or common duct. Impaction occurring after or unrelieved by a cholecystostomy produces a permanent mucous fistula. The persistence of an external mucous fistula may also be due to a stenosed or strictured cystic duct. A strictured or injured common duct may cause the persistence of an external biliary fistula. Calculous occlusion of the common duct causes temporary or permanent obstructive jaundice of gradual or sudden onset, leading, in some cases, to biliary cirrhosis. Stones in the hepatic ducts and in the liver are of unusual occurrence. Calculi lodging in the bile-ducts may cause, after a time,

at point of arrest, pressure ulceration, scarring, cicatricial contraction and stricture. If the calculus or calculi lodge or become impacted in the cystic duct, there may ensue an intermittent or continuous hydrops or mucocele of the gall-bladder, or an acute or chronic empyema. In the absence of impacted calculi, hydrops fellae and empyema are due to inflammatory sequelae causing a complete stricture, compression, closure or occlusion of the cystic duct. Complete obstruction of the cystic duct results in distension of the gall-bladder by clear mucus without bile. The cystic duct may be obstructed by the direct mechanical pressure of an enlarged lymphatic gland.

Infections of the gall-bladder involve, simultaneously or successively, one, two or more of its coats. Usually they are mural, interstitial, deep-seated, and when virulent or long-continued, invariably produce permanent histological changes. The integrity of the mucous membrane, submucosa and muscularis may be seriously impaired. Pericholecystitis, more or less extensive, is frequent. Any inflammation of the gall-bladder may be complicated by a localized or diffuse peritonitis. In chronic cholecystitis, the gall-bladder is thickened, sclerosed, shrunken and embedded in adhesions; in rare cases, it is the seat of calcareous degeneration. Long-standing calculous occlusion of the common duct leads to a contracted gall-bladder in about 85 per cent. of the cases (Courvoisier's Law).

Inflammation proceeding to the stage of supuration results either in an empyema, acute or chronic, a phlegmonous inflammation of the gall-bladder wall or a pericholecystic abscess. If an infected gall-bladder ruptures into the hepatic substance, a liver abscess results. Ulcerative inflammation, like gangrenous inflammation, is local or general, and involves the gall-bladder wall in part or in its entirety. If ulceration or gangrene extend through the whole thickness of the gall-bladder wall, perforation, acute or chronic, occurs either into the free peritoneal cavity, or, protective adhesions being present, into a neighboring hollow viscus. In the former case, a diffuse peritonitis results; in the latter, an internal biliary fistula ensues. "Perforation of the gall-bladder into the transverse colon or duodenum is not infrequent" (W. J. Mayo).

Pericholecystic adhesions are usually due to gall-bladder disease. They may bind the gall-bladder to the omentum, pylorus, duodenum, transverse colon, anterior abdominal wall, etc.; they may kink, twist, obstruct or compress the pylorus, the cystic or the common duct, and when they impede the evacuation of the stomach and the easy filling and emptying of the gall-bladder, there results pain, digestive and other disturbances.

Inflammations of the bile-ducts that heal by scar formation lead to stenoses, to strictures. Cicatricial changes in the gall-bladder produce distension, deformity, sacculation, hour-glass contraction, fibrosis or atrophy of the organ.

\* \* \*

The physiologic and pathologic relations existing between the stomach, duodenum, head of pancreas, liver and the gall-bladder and bile-ducts influence, obscure the symptomatology of disease of this region, and contribute to the uncertainties of early diagnosis. The clinician, despite the aid of a carefully elicited history and a judicious analysis of symptoms, is often unable to determine accurately previous to a laparotomy the extent and duration of gall-bladder involvement. As the clinical manifestations frequently do not correspond to the morbid anatomy present, and as many of the symptoms from which these patients suffer are reflex in origin, an exact diagnosis is often impossible previous to exposure of the seat of disease to inspection and palpation. Gall-bladder disease does not present a uniform clinical picture. The symptoms or signs are those of infection, inflammation, obstruction (calculous or non-calculous) and dysfunction, such as digestive disturbances, biliary dyspepsia, nausea, vomiting, belching, etc. "Fair, fat and forty with belching" (Deaver).

Adhesions resulting from acute or chronic pericholecystitis, pre- or post-operative in origin, may cause great distress, may impair the functional integrity and motility of the gall-bladder and surrounding organs; if omental, the pull on the greater curvature may be such as to render gastric peristalsis painful. Infective inflammation causes continuous, intermittent or paroxysmal pain, which may be localized (biliary ache, dull pain in right hypochondrium) or radiating (biliary colic)

Chills, fever, sweats, prostration, localized tenderness and rigidity over the gall-bladder region are always present in the acute stage. The different stages of inflammation: Catarrhal, suppurative, ulcerative, gangrenous, fibrotic—are accompanied by their respective symptoms. Obstruction to the biliary flow causes jaundice, cholemia with its accompanying disturbances, pruritus, etc. Some of the symptoms of chronic gall-bladder disease are due to adhesions; many result from coincident or associated disease of the duodenum, liver, pancreas, etc.; others are caused by the diseased gall-bladder.

To arrive at well-founded conclusions, it is important: (a) To take a careful history, and to make a complete physical examination. Keep in mind that gall-stones and gall-stone colic are not essential to the clinical picture of gall-bladder disease. Gall-stone formation is merely a frequent incident of gall-bladder infection; (b) to consider the roentgenological evidence. An affirmative roentgenological diagnosis is highly reliable. X-rays are able to visualize about 50 per cent. of cases of cholelithiasis. Fluoroscopic and x-ray observation of the stomach and intestines prove serviceable by revealing the existence of adhesions and other unsuspected abnormalities; (c) to interpret intelligently and skilfully the physical signs elicited and the evidence furnished by cholecystography. The oral and intravenous method of dye-injection are both valuable; (d) to analyze the laboratory findings: urine, blood, stomach contents, etc. They may furnish corroborative data. Non-surgical drainage of the bile tracts is a diagnostic procedure which has not yet come into general use. Its value is disputed by some.

\* \* \*

Cholecystostomy and cholecystectomy have each their advocates and respective indications. The operator should adopt the type of operation best suited to the case at hand. He must individualize. The indications are to shorten the patient's convalescence, to hasten his return to health, and to correct the existing pathology either by drainage or by more or less complete removal of foci of infection. Cases associated with much gross pathology tax the ingenuity of the surgeon. The degree of recovery secured is in direct proportion to the extent of pathology corrected.



The success or failure of an operation depends upon the degree of relief obtained, the results secured, and the absence of unpleasant post-operative sequelae. It is only after the abdomen has been opened and the anatomical changes present have been ascertained that the surgeon, best judge of his patient's resistance, can intelligently select the appropriate operative procedure.

Ideal surgery calls for the conservation of organs. There should be no needless mutilation. We disapprove of the prophylactic removal of the gall-bladder—the removal of an organ for conditions that may not occur. Cholecystectomy involving the sacrifice of an important organ is usually an operation not of election but of necessity. The small mimic gall-bladder formed at times after removal of the real viscus, is not a regenerated gall-bladder, but merely a distension of the stump of the former gall-bladder. It cannot perform the function of the parent organ. We believe that slight degrees of cholecystitis can resolve and the parts be restored to normal.

Surgical treatment should be instituted at the onset or in the early stages of gall-bladder disease, before the advent of such preventable complications as common duct obstruction (calculous or non-calculous), rupture of the gall-bladder into the free peritoneal cavity or into an adjacent viscus, various forms of pancreatitis, etc., before the pathology is so far advanced that restoration of normal function is doubtful. During the early period of disease, the operative difficulties are minimal, the mortality is practically negligible, and improvement and cure easier of attainment. In the young, the percentage of recoveries is high; the operative mortality, very low.

When disease of the biliary tract is complicated by surgical disease of other abdominal or pelvic viscera, should the patient's condition not warrant a prolonged operation, the surgeon will do all that is consistent with the patient's safety, and defer further operative work to a more propitious time.

In diseases of the gall-bladder and bile-ducts, cholecystostomy is the operation of election:

1. In the aged, the feeble, the obese, and in all patients whose general condition does not permit of more than the least amount of operating; in the presence of advanced cardio-vascular, advanced cardio-renal, advanced hepatic disease; in all cases in which a prolonged operation or an

extensive dissection might be productive of severe shock or might cause death; in all critical cases, as an emergency operation, when great debility or other conditions, such as deep jaundice, due to stone in the common duct, etc., necessitate haste and make cholecystectomy too dangerous or too prolonged an operation at that time. It is a good surgical principle to not subject patients to more than the minimal amount of trauma consistent with their general condition and the indications present. A very short incision immediately over the gall-bladder, and the insertion into it of a drainage tube or gauze, constitute almost a minor operation.

2. In cases associated with pregnancy.
3. In cases associated with pancreatic disease.
4. In all other patients in whom the existence of complications or disease of proximal organs make cholecystectomy too hazardous, too risky.
5. In deep jaundice, due to calculous or non-calculous occlusion of the common duct or to its compression by adhesions, by the head of the pancreas, etc. Decompression of the liver by drainage with the minimal interference is indicated in deep jaundice; owing to the decreased coagulability of the blood, there is great danger of fatal post-hemorrhage. In these patients, the question of hepatic function must be seriously considered.
6. If the gall-bladder be very intimately adherent to the surrounding organs. Adhesions may so firmly glue the gall-bladder to surrounding structures that its removal necessitates the dissection of inflamed tissues and leaves raw surfaces, potential portals of infection. Duodenal and other intestinal fistulae have resulted from the separation of dense adhesions binding the gall-bladder to the gut.

7. In cholelithiasis, for the removal of gall-stones from any or all of the following locations: Gall-bladder, cystic or common duct, provided that the gall-bladder presents a normal appearance, or is only slightly diseased, and the cystic duct neither ulcerated nor strictured. The chief cause of relapse in gall-stone disease is the leaving behind of undetected stones. In the absence of valid contraindications, all gall-stones call for operative removal. Early removal of biliary sand and gall-stones has been advised as a prophylactic measure against malignancy.

8. In the early stages of cholecystitis, calculous or non-calculous, when the gall-bladder is but



slightly altered and cystic duct is patulous, removal of stones and drainage may be followed by return of function and restoration of organ to normal structure. There are mild degrees of cholecystitis that do not produce thickening of the gall-bladder wall.

9. In acute pancreatitis complicating gall-bladder disease. The association of gall-stones and pancreatitis is variously given as between 50 per cent. and 65 per cent. Mayo reported that in 80 per cent. of the operations on the pancreas, there are lesions induced or accompanied by gall-stones.

10. In all cases, traumatic or pathologic, and in which there is imminent danger of post-operative stricture of the common duct, also in those in which, a stricture being present, there is no hope of re-establishment of the patency and function of the common duct. In the presence of these conditions, the necessity of anastomosing the gall-bladder to the gut may be immediate or may arise at some future time. After a cholecystectomy, no short-circuiting operation between the gall-bladder and the gut is feasible.

11. In the course of all laparotomies in which you have not encountered infection, and the patient's condition warrants it, examine the gall-bladder. Palpation may reveal the presence of gall-stones. As in these cases the calculi have not caused marked symptoms, and the gall-bladder wall usually presents a normal histological structure, cholecystostomy suffices.

12. In certain cases of cholangitis accompanied by icterus and enlargement of the liver and pancreas.

13. In certain cases of malignancy with obstructive jaundice due to carcinoma of the common duct or of the head of the pancreas. In these cases, if radium treatment be thought desirable, the gall-bladder can be used as an avenue for its application.

14. In all cases where temporary drainage of the gall-bladder and bile-ducts is indicated: (a) presence of infected foci in the liver; (b) to secure the expulsion of stones overlooked at time of operation. Drainage permits spontaneous discharge of small intrahepatic concretions as they pass downward to the extra-hepatic ducts.

15. In all cases where the mechanical difficulties incident to a cholecystectomy are great and make the operation extra hazardous.

Convalescence after a successfully performed cholecystectomy is shorter, attended with less discomfort, and less complicated than after cholecystostomy. The post-operative course is as uneventful as that of a salpingectomy for pyosalpinx. Following removal of the gall-bladder, recurrence of symptoms is uncommon and the percentage of cures is high; the danger of pericholecystic adhesions and mucous fistulae-formation is non-existent. One of the most valid objections to cholecystostomy is the frequency with which post-operative adhesions form after its performance. "In the Mayo Clinic, cholecystectomy is performed in more than 90 per cent. of cases, as against cholecystostomy in less than 10 per cent." (Mayo).

The disadvantages of cholecystectomy are: (a) it is difficult of execution; (b) it is not of universal application. The gall-bladder should never be removed unless one is certain that the common duct is patent; (c) it is attended with the danger of shock, hemorrhage, injuries to the common duct, to the duodenum, etc.; (d) it has a slightly higher operative mortality than cholecystostomy; (e) it removes a useful organ, the functions of which we do not definitely know.

Cholecystectomy is the indicated operation if the patient's general condition permits:

1. In all localized or diffuse ultra-acute inflammatory conditions, ulcerative, gangrenous, phlegmonous or membranous cholecystitis. In all cases of cholecystitis in which the gall-bladder is so altered that, judged by gross evidence, "it can not come back."

2. In acute cholecystitis, when the gall-bladder is very distended from blockage of the cystic duct.

3. In advanced chronic or repeated inflammations of the gall-bladder. When the organ is markedly thickened, contracted, atrophied, deformed, shrunken or adherent, and when it is evident that it cannot be restored to its normal condition, when it is evident that it is irretrievably lost, or that the disease is progressive in nature, as in fibrous or calcareous degeneration. In these cases, the elasticity of the gall-bladder wall is impaired or lost, and its glandular secreting apparatus partly or wholly destroyed.

4. In a "strawberry" gall-bladder, the gall-bladder mucosa being covered with tiny beads.

*(Continued on page 96)*

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## EDITORIALS

### THE DOCTOR LOOKS AT HOBBIES

Recently there has been published a volume by one of our own profession recounting the literary efforts of the medical profession. The book itself is an attractive and valuable addition to our publications, but, more than that, it represents the avocation of one of our most distinguished members and brings to mind the old saying that everyone should have a hobby. There is probably

nothing that tends more to keep one young, open-minded and mentally alert than a hobby. No group of professional men need the advantages accruing from a hobby more than the doctors. It doesn't matter nearly as much what the hobby is as it does that you have a hobby; let the hobby be the collection of postage stamps, etchings, antique furniture, or butterflies; or let the avocation be a study of early American history or anthropology or magic, or hunting, fishing or travel. To have such an intense interest in something outside of the routine work of the day that is wholesome,

that brings new contacts and widens the mental horizon is a real benefit to every physician. It gives us a plaything when our working days are over; it need not be an expensive hobby, and in many cases is often made an ultimate source of revenue. The single track mind wears out early, is narrow and tends to lead to a pessimistic outlook on life. It behooves us all to get a hobby, develop it and receive dividends from it in the form of health and happiness..

---

### POSTURE

To the physician who has the inspection of school children as one of his duties, the importance of posture is an ever present problem. The general relationship between nutrition and posture is also evident.

During the war the importance of posture was forced upon the medical corps, because the hospitalization of those showing the higher degrees of poor posture was a serious factor. Since that time more interest has been taken in determining the degrees of posture and the prevention of poor posture.

It is always dangerous to attempt to establish standards in anything so subject to individual characteristics as the human body. However, there must be some basis for comparison. The usual grouping is that of the four classes, A, B, C and D, with A as the proper posture and D the extreme poor posture and B and C the grades between. These grades are determined by silhouette-ographs compared with the definite standards.

The recent figures as reported by Dr. Alfred Worcester, Professor of Hygiene at Harvard College are significant. Of 834 students examined, only 35 were in the "A" group, 300 in the "B" group, 375 in the "C" group and 124 in the "D" group. This means that practically 60% were in the 2 lower grades.

It was reported that these figures were better than last year's, but certainly far from being as they should be. Here is undoubtedly a fertile field for study among school physicians, who have under their supervision a group that is amenable to prevention and is eager to co-operate in the improvement of their health.

### NEWS ITEM

It will be of interest and satisfaction to medical men of Rhode Island to know that Dr. Isaac Gerber, of Providence, has recently been appointed visiting radiologist to the Pondville Hospital, at Norfolk, Mass. This hospital, which will be opened by Gov. Fuller on June 21st, is under the direction of the Public Health Department of Massachusetts, and is part of the commonwealth's recently inaugurated campaign against cancer. The institution will have 90 beds all devoted to the treatment of cancer of every type. There will be complete equipment for operative, X-ray and radium service to all the patients.

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### DISEASES OF GALL BLADDER

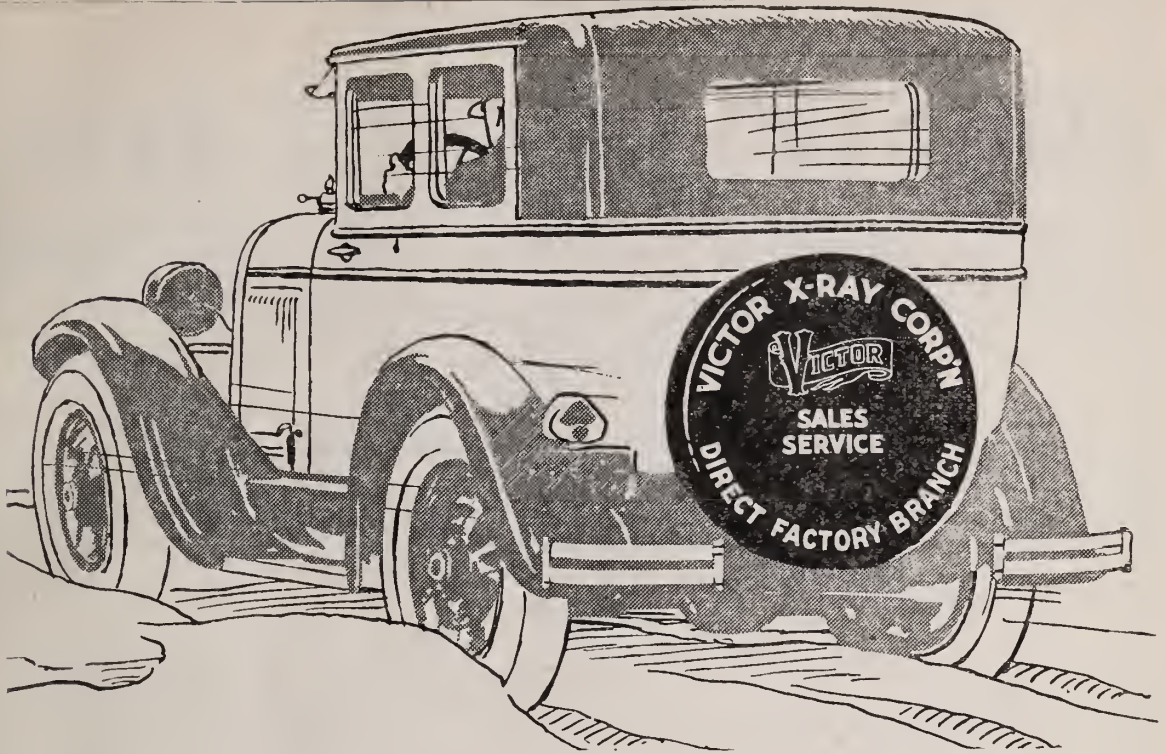
(Continued from page 94)

5. In hydrops fellae, due to blockage of the cystic duct, secondary to stricture or to impacted stone.
6. In empyema of the gall-bladder due to an impacted stone or strictured cystic duct.
7. For the cure of pathologic fistulae existing between the gall-bladder and a hollow viscus, if associated with disturbances calling for treatment.
8. For penetrating injuries, ruptures and perforations of the gall-bladder of either traumatic, calculous or inflammatory origin.
9. For mucus fistulae of the gall-bladder resulting from stricture or other obstruction of the cystic duct.
10. In chronic obstruction of the cystic duct, whether due to stone impaction, scar-tissue formation or torsion of the gall-bladder.
11. In irreparable injuries of the gall-bladder.
12. In volvulus of the gall-bladder.
13. In benign neoplasms of the gall-bladder.
14. In operable malignant neoplasms of the gall-bladder.

### REFERENCES

1. Brewer: Recurrence of Calculi in Common and Hepatic Ducts after Cholecystectomy. Arch. Surg., 1921, ii, 145.
2. Chauffard: Indications opératoires dans les ictères chroniques lithiasiques. Rev. gén. de clin. et de therap., 1919, xxxiii, 433.
3. Crile: Some special Points in the Surgery of the Gallbladder. Med. Rec., N. Y., 1920, xcvi, 584.  
Certain Problems Connected with the Surgery of the Gall-Bladder. Northwest Medicine 1921, xx, 53.  
Special Points in Gall-Bladder Surgery Ann. Surg., 1923, lxxviii, 191.
4. Darner & Cullen: The End-Results in Nearly Three Hundred Cases in which the Gall-Bladder was Drained—not Removed. Surg, Gynec. & Obst., 1923, xxxvii, 579.





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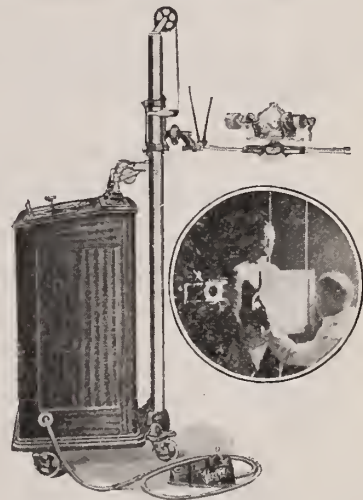
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## ORIGINAL ARTICLES

### WEIGHT REDUCTION IN NERVOUS AND MENTAL DISEASES\*

By WILLIAM NEWTON HUGHES, A.M., M.D.

PROVIDENCE, R. I.

Fat, though a tissue of much bulk, has an exceptionally poor blood supply. Its blood vessels are few and for the most part small. It is stored food to be utilized with the least destruction to other tissues of the body. It is a burden to most fat people, even if to lose it is a fad which is followed by many spasmodically just as they follow other fads. Simply by losing weight, so say paper and magazine articles, radio talks, insurance pamphlets, and government bulletins, which extol the svelte and curse the fat, it is possible to automatically acquire that better health which will give the best possible service over the longest possible period of time. Such publicity does much good and much harm, and perhaps what follows will help you better to appreciate the good and the harm of weight reduction.

There are many motives for losing weight. Chief among these are the desire for social approval or the desire to look well and to please, and the desire to regain that lost and mythical youth which consists of all the things done or thought to have been done at that time. A graceful figure to set off fine clothes and jewelry is naturally much desired and much to be desired, as is also the pep, ambition, and attractiveness which belonged to the thin but bygone days of youth. But it is not necessary for the fat person to "half-reason" in some such way before he starts to regain his sense of superiority and self respect through reducing weight, for there is a real and most important reason for weight reduction. It is embodied in the slogan, Better Health for the Best Service for the Longest Possible Period of Time.

\*Read before the Rhode Island Society for Neurology and Psychiatry at The State Hospital for Mental Diseases, Howard, R. I., Feb. 14, 1927.

The betterment of the health in weight reduction occurs for the most part through the removal of functional handicaps of a physical or mental nature with a rise in the level of the general sense of well being, which is called by the French *cenesthesia*. The general sense of well being is thought to be due to streams of impulses from all the organs and tissues of the body. With the removal of functional handicaps the incoming, more normal and pleasing impulses raise the level of *cenesthesia*, which, according to Adler, is accompanied by a rise in the level of our superiority feeling. The level of *cenesthesia* and of our superiority feeling is raised through the removal of excess fat because every tissue of the body is allowed to function more normally. Heart, kidneys, liver, and pancreas do less work if the body weighs less and do not wear out as quickly. The heart secures more rest and can work more efficiently, when it does not have to sustain the burden of fat just as it does after the removal of an enormous fibroid. With a more efficient heart the circulation is improved throughout the body and every tissue is allowed to function more easily, for food, oxygen, and internal secretions are always available in the blood, and tissue waste products are quickly removed by the blood. Functional dyspnea will often speedily disappear with the removal of excess fat and the improvement in the circulation. The brain, which suffers most quickly if its blood supply is interfered with, will also improve markedly if its circulation is improved.

A proper posture with its incalculable benefits may be more easily maintained if there is not an excess of fat. Sagging arches of the feet and swollen ankles will then be allowed to return to normal, and with decrease in abdominal prominence will occur decreased lordosis.

With decrease in weight, the environment may be changed much more easily and this will bring many new stimuli to activity. Work, at times difficult to find for an obese person, may often be obtained. More sports and social activities may be enjoyed and enjoyed with something like the pep and enthusiasm of youth. With social approval

from loss of weight and from increased activities come increased self respect as well as self confidence in one's self control, for each pound of weight lost signifies a victory for self control.

Many diseases or symptoms are much relieved or entirely cured by weight reduction as a consideration of the following will show: Diabetes, indigestion, gall bladder disturbances, hypertension, arthritic conditions, heart troubles, menopausal symptoms, leucorrhea, menstrual pains, and chafing of the thighs. Tinnitus, which occurs in certain cases of hypertension, and depression of the menopause may often be strikingly relieved by weight reduction.

Education in regard to diet is not only of value in the process of reducing, but it also raises the level of cenesthesia through the use of a properly balanced diet. Often fat people eat many calories, but do not get sufficient vitamins and mineral salts in their diet. The teaching that a certain amount of protein, about 55 grams daily, is necessary to protect the heart muscle in dieting, and that a certain amount of carbohydrate is necessary to prevent acidosis aids in promoting health and longevity through making it much easier to get patients to take these foods during acute and chronic diseases with anorexia. The training in regard to what is and what is not constipation as well as what foods and measures are necessary to overcome it, will prove to be useful throughout the entire life of the individual. Weight reduction like so many other methods of treatment is re-education.

There are, of course, many disadvantages and dangers to weight reduction, especially if it is too rapid or is not controlled by a properly qualified physician. Most of the dangers are due to an insufficient caloric intake; to a poorly balanced diet; to the high protein diet used; and to the abrupt change in diet. A few of the symptoms noted in reducing are weakness, headache, anorexia, susceptibility to colds, chilliness with cold hands and feet, lack of pep and ambition, empty all-gone, gnawing feeling in the stomach region, increasing mental depression extending perhaps to exhaustion psychosis from undernutrition. Many other symptoms resembling those seen in the various types of psychoneuroses occur and are probably due to the low caloric diet, though in some cases they may be due to an ill balanced diet, for at

times the patient will not eat all the food ordered by the doctor, or will eat according to some diet scheme of his own without medical advice. With an insufficient caloric intake and with an ill balanced diet, the central nervous system is one of the first tissues to suffer, as tissues which are the most highly differentiated and the most recent in evolutionary development seem to suffer first under such circumstances. Even with gradual weight reduction a few minor symptoms are generally noted after four or five weeks of reducing. More serious symptoms, however, are not observed if the diet and the patient are properly controlled.

The high protein diet necessary in weight reduction is especially dangerous to those with kidney disease, arteriosclerosis, and hypertension, and since these diseases are more common in persons over 50 years of age, it is very necessary to proceed extremely cautiously in weight reduction in such people. These patients also do not stand undernutrition very well. Hemorrhages and thromboses may occur from poorly nourished blood vessel walls or from hypotension.

Rapid loss and gain of weight, which sometimes occur in spasmodic dieting, mean rapid destruction and construction of tissue. This double process may be too much for those over 50 years, since in weight reduction other tissues than fat are destroyed and reconstructed to a certain extent. Any sudden change in diet may also prove very dangerous as is well known in diabetes.

Patients without teeth, at all ages, need especial care during weight reduction. They are apt to take too high a carbohydrate and too low a protein diet, even when under a physician's care. Because of this, they must be frequently checked up and the necessity of a strict adherence to the diet repeatedly explained to them. They must stop reducing when they are 9 or 10 pounds overweight, as they tend to continue losing weight for a long time after their diet is stopped. Other patients at times, because of persistent anorexia, are unable to stop losing weight when this is advised. They need to be followed even after they have achieved the desired weight.

Obese people with long trunks and spines and large bony frame-works will suffer if they are not allowed to retain more weight than most other types of body physique. People under 30 years must also be allowed to weigh more than they



would if they were over 30. Ill-advised reduction in these cases will often result in many undesirable symptoms.

Activation of tuberculosis, goitre, latent syphilis, and latent neurosyphilis may be brought about through the tissue destruction which occurs in reducing. Such diseases should be ruled out before a reducing diet is started.

The dangers from the use of thyroid extract are well known and, without any other therapeutic indication than obesity, thyroid extract is not indicated in weight reduction.

Hypotension with the possibility of cerebral thromboses may occur during the reducing process especially in older patients and in those with little resistance.

With too rapid weight reduction in pregnant women abortions may occur, and in both men and women the vitality of the sex cells may be increased or decreased. Generally, however, pregnancies are more apt to occur in women who have reduced than in those who have remained fat.

Among the minor annoyances which occur in weight reduction are constipation, inability of the patient to buy new clothes, censure of the doctor for any acute disease which may develop, improper shoes, and remarks of neighbors in regard to wrinkles and the appearance of increased age. Constipation can be relieved by an abundance of fruits, fluids, and 5% vegetables. Unless a patient can afford to discard old clothes for new ones, it will be very difficult to get him to continue dieting, for his clothes will quickly become too large and look too queer. Alterations will prove useful, but they will not be sufficient if there is much weight reduction. The doctor and the treatment are blamed, of course, for any and every disease which may develop during or immediately after the reducing period. Men can easily be induced to wear correct shoes for walking during their treatment, but it is rather difficult to get some women to buy or to wear them. The remarks of neighbors can be anticipated and generally quickly overcome by suitable explanation.

A complete history and physical examination is indicated before weight reduction is started. At the beginning of, and frequently throughout the reducing course, the urine, the blood pressure, and the heart should be examined. The diet should be properly balanced and have an excess of protein.

Generally a high protein food is given three times a day, since at least 55 grams of protein daily is necessary, according to Allen, to prevent the utilization of heart-muscle-protein for food. During the first few days, a diet of 500 to 800 calories is given to allow the size of the stomach to decrease through increased tonus of its walls; then a diet of 1000 to 1500 calories is used. A diet of 1700 calories is advised one or two days each week. No hunger and essentially no symptoms from weight reduction occur with a properly balanced diet of 1200 calories or more. Fourteen hundred calories is considered the optimum number of calories in the reducing diet, but a lower caloric diet generally has to be given to outwit patients who eat more than the diet calls for. If weight reduction proceeds too rapidly with the lower caloric diets, higher caloric diets can be given. Weight reduction must be very gradual, one or two pounds a week with a rest on a maintenance diet for a few weeks after the loss of 15 to 20 pounds. There is plenty of time to lose weight after a start has been made. To make dieting easier, the patient can learn to consider all foods, especially sweet foods offered by friends, as a lump of fat to be carried around on his back, and not as a delicacy to be desired. Also by observing wealthy people who remain thin though they have enough money to buy any food that they may wish, he can learn that they have to possess and to use self control in diet just as he will have to do if there is any tendency to be fat. This observation may bring him great comfort even if it ought not to do so.

During the periods of lowest caloric intake, exercise of a strenuous nature is to be avoided as much as possible, but walking at least two miles daily is very beneficial and should be advised.

Weight reduction should cease when the patient is 5 or 6 pounds overweight, since anorexia often persists after dieting has been stopped. If he is without teeth, it would be better policy to stop the diet when he is 9 or 10 pounds overweight.

Weight reduction in nervous and mental conditions is of most value in raising the level of anesthesia through the removal of functional handicaps of a physical and mental nature, but it is also of much value as a psychotherapeutic aid. It is easy to cause a patient to lose weight; much easier than it would be to cause him to gain it. With success achieved in losing weight, the patient has

developed a certain amount of self control and of self confidence. When the doctor convinces him that he has these two virtues to some degree, it is possible to apply them to other problems than that of losing weight. Reducing also gives the patient something actual to do while his mental problems are being solved, and if he recovers, he can attribute his cure to weight reduction rather than to explanation and advice if that helps him in retaining his self respect and superiority feeling. Recovery in mental conditions, of course, may occur if he can again do the work for which his obesity disqualified him.

Weight reduction will aid in overcoming wrong ideas from which patients construct wrong diagnoses. Those, who without good reason fear or suspect ovarian or uterine tumors and pregnancy, may many times be convinced through weight reduction, when it would have been almost impossible to convince them otherwise, that their condition was due to a sudden increase of fat. Dyspnea and the patient's mistaken diagnosis, heart trouble; swollen ankles with the mistaken diagnosis, kidney trouble; leucorrhea and menses thought to be due to ovarian or womb trouble; indigestion thought to be due to ulcer, cancer, or gall bladder disease; hypertensive and menopausal symptoms thought to be due to insanity; various symptoms thought to be due to high blood pressure or what not, may all be made to disappear through the psychotherapeutic use of weight reduction. The depression of diabetes and of the menopause seem somewhat alleviated through weight reduction even without the studied use of psychotherapy.

The removal of social and economic barriers, raised by obesity, help to give renewed hope and ambition. The sense of achievement and the self control and the self confidence which occur in weight reduction are of great value in almost all nervous conditions. Even obese patients with encephalitis lethargica seem to become more active and happy when some of their surplus weight is removed.

Depression, neurasthenia, exhaustion psychosis, activated neuro-syphilis, and other serious results from uncontrolled weight reduction occur occasionally at the present time as problems to the practitioner in nervous and mental disease, but they will probably diminish as soon as patients learn that dieting is a measure to be initiated and controlled by physicians and not by themselves.

### Summary

In nervous and mental diseases, weight reduction is of value through raising the level of the general sense of well being, the cenesthesia of the French. This occurs chiefly through the removal of functional handicaps of a physical or mental nature.

Weight reduction is a valuable psychotherapeutic aid in nervous and mental diseases, especially in phobias concerning disease. It should occur, however, very gradually over a long period of time.

Better physical and mental health which will give the best service over the longest possible period of time should follow all properly controlled weight reduction. There should be essentially no dangers if the diet and the patient are controlled by a conscientious physician.

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### GRADUATE MEDICAL WORK IN NEW YORK

In a pamphlet recently received, the opportunities for clinical study in postgraduate schools and hospitals of New York City have been set forth in elaborate detail. This pamphlet, prepared and issued by the Committee on Medical Education of the New York Academy of Medicine, shows which of the eighty-six hospitals in greater New York have general internships, those which have residencies in the specialties, and those which hold special clinics. Through this leaflet a physician can easily ascertain where to get such advanced medical instruction as he may desire. The map guides inserted in the pamphlet also will enable him readily to find any hospital in either New York or Brooklyn. In no other city in this country have the facilities for graduate instruction been so well organized, or the hospitals and clinics so carefully catalogued. The larger cities of this country, with their many well conducted hospitals and dispensaries, provide a great abundance of excellent clinical material which, if properly organized either through some such central committee or through university graduate medical schools, could be utilized in the higher education and training of physicians. Such organization for graduate medical instruction now constitutes one of the greatest needs in medical education in this country.—*Jour. A. M. A., August 14, 1926.*



# THE RHODE ISLAND MEDICAL JOURNAL

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## RHODE ISLAND MEDICAL SOCIETY

Meets the first Thursday in September, December, March and June

NORMAN M. MACLEOD	<i>President</i>	Newport
ARTHUR H. HARRINGTON	<i>1st Vice-President</i>	Saylesville
FRANK T. FULTON	<i>2nd " "</i>	Providence
JAMES W. LEECH	<i>Secretary</i>	Providence
J. E. MOWRY	<i>Treasurer</i>	Providence

### DISTRICT SOCIETIES

#### KENT

Meets the second Thursday in each month

FENWICK G. TAGGART	<i>President</i>	East Greenwich, R. I.
J. F. ARCHAMBAULT	<i>Secretary</i>	Arctic, R. I.

#### NEWPORT

Meets the third Thursday in each month

WILLIAM S. SHERMAN	<i>President</i>	Newport
ALEXANDER C. SANFORD	<i>Secretary</i>	Newport

PAWTUCKET  
Meets the third Thursday in each month excepting  
July and August

ROBERT T. HENRY	<i>President</i>	Pawtucket
LESTER J. GILROY	<i>Secretary</i>	Pawtucket

#### PROVIDENCE

Meets the first Monday in each month excepting  
July, August and September

HENRY J. HOYE	<i>President</i>	Providence
P. P. CHASE	<i>Secretary</i>	Providence

#### WASHINGTON

Meets the second Thursday in January, April,  
July and October

M. H. SCANLON	<i>President</i>	Westerly
WM. A. HILLARD	<i>Secretary</i>	Westerly

#### WOONSOCKET

Meets the second Thursday in each month excepting  
July and August

EDWARD L. MYERS	<i>President</i>	Woonsocket
WILLIAM A. KING	<i>Secretary</i>	Woonsocket

**R. I. Ophthalmological and Otological Society**—2d Thursday—October, December, February, April and Annual at call of President Dr. J. J. Gilbert President; Dr. M. J. O'Connor Secretary-Treasurer.

**The R. I. Medico-Legal Society**—Last Thursday—January, April, June and October. Dr. Creighton W. Skelton President; Dr. Jacob S. Kelley, Secretary-Treasurer.

## EDITORIALS

### MEDICAL ASPECTS OF THE VACATION SEASON

The effects of the vacation season upon public and private health merit more than passing thought. The hurry and bustle of our American life is vastly stressed, the need of recuperation and refreshment are well known as are their results. All agree that the out of door life, exercise, and rest are splendid reconstructive agencies and

that the more one may enjoy these the longer it may be before the grim reaper makes a note upon his cuff and the mortician's number plate U-2 is seen in front of your late residence. But are the classical two weeks enough and can the world's work go on were it four? Inquiry would seem to show that our economic structure is such that it is impossible, yet we know that two weeks are not enough and that there is a very considerable percentage of persons who are unable to have those things which make for the betterment of the physical life. Yet the matter should be urged and



a propaganda instituted leading to far more relaxation of industry during the heated season and modification of present conditions, leading to longer vacations. With the exodus to shore resorts come important sanitary problems which must be met. Many of these shore communities are of such rapid mushroom growth that they hardly fulfill the requirements of decency let alone sanitation. The preservation and transportation of food are of great importance and will require intensive effort on the part of those concerned. At no time of the year is the nature and quality of the advice of physicians to patients during the heated season of more importance. Both personal and professional advice should be given with the greatest care and positiveness. The season will bring its usual number of sudden deaths from over-exertion of those who put too much strain upon an already overburdened heart, of pneumonia in those who suddenly enter a life of exposure and hardship without sufficient clothing or physical preparation and many a doctor's bill will remain unpaid because of the unnecessary strain placed upon an already depleted purse by absurd tribute to style and fashion. It is a season in which the medical profession may well overhaul its methods that its instructions may be offered in the most presentable and acceptable form urging with greater earnestness than ever those sublime truths for which it has always been famous, the appropriation and adoption of which will bring a reward in the prevention of disease and death and in the acquisition of health that cannot be overvalued.

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#### DR. McGRATH

Quite recently a movie actor was killed at Hollywood and the death return was falsified to cover up a murder. Within a few days a man was sentenced for killing a man whose wife he wanted for himself. The victim was supposed to have died from natural causes. After his death, the murderer and the wife of the murdered man began living together and some one talked. The man was accused of killing the husband of the woman and he confessed. The body was taken from its grave and a bullet wound was found. Such examples of attempted concealment of criminal acts are frequently reported, and one can only surmise how often attempts are successful.

Public welfare and public safety require that the exact and truthful cause of every death be recorded. If a physician wilfully or in ignorance wrongly reports a death really due to smallpox, or some other serious disease, he may be guilty of starting a serious outbreak. If a surgeon reports deaths of postoperative cases inaccurately his reputation and the good name of the hospital in which he works will ultimately suffer. Truthful causes of death, of course, can only be reported by skilful physicians, and the public is safe in such hands.

Of particular importance to public safety are correct death returns of persons dying by violence, or, dying suddenly whether in public places or in the home.

The recent report of the illness of Dr. McGrath, medical examiner of Suffolk County, Mass., calls to mind an example of a valuable public officer. Physicians in this part of the country know of his ability and the wonderful service he has rendered to the City of Boston. He is an excellent pathologist and wise in matters of medico-legal medicine. Through his hands pass all medico-legal death returns of his district, and the physicians who write them must satisfy him of their accuracy, for he is exacting in eliciting the truth. He, or his assistant, personally perform autopsies on all deaths occurring under suspicious circumstances.

The office of coroner is a very old institution. Until recent years it has been held by some layman, often a lawyer. He might be versed in the law but his information about causes of deaths must come from physicians, many of whom, even where they hold official positions, are incompetent. The office of coroner is being replaced by that of medical examiner. A medical examiner should be a physician who knows pathology, much about clinical medicine, and be versed in medico-legal matters. He needs be a highly trained man who devotes all his time to his duties. There should be a Dr. McGrath in every large city, county and state.

In our own state the need of a competent medical examiner is very great. His office should be free from politics and his authority should be unhampered by higher legal authorities. Our present medical examiners are not especially qualified for their duties, for they all are general practi-

tioners. Under present conditions if they think an autopsy should be performed they must consult the attorney general who is more than likely to refuse because of the expense. Rhode Island is a small state and one medical examiner could supervise, at least, all medico-legal matters within its borders. Why can't we have a Dr. McGrath?

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### BREVITY

Brevity is not only the soul of wit but it is the very essence of helpfulness in medical writing. In this regard we note with the greatest of satisfaction and heartily commend the custom of some medical journals, notably the J. A. M. A. for concluding many of its articles with a brief numbered synopsis of the subject matter offered. The literature of medicine is enormous, that of its subdivisions voluminous and this method should be urged and encouraged. Another great help to the studious reader is the assembling in a scrap book cuttings of matters which particularly interest him. Cards are a nuisance, they are easily misplaced or lost and cuttings can be removed and pasted in place in far less time than it takes to type or write a reference card. Even if references are not assembled under headings they may be easily classified in an index or marked with soft crayon which allows instant reference. We then have a digest of a digest, it is information reduced to its lowest terms and soon becomes invaluable. Did one begin such a system early in his scientific career it would be easy to see how much of that which is supposed to be new is really old and well supported by experimental evidence.

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### LETTERS RECEIVED

Doctor Frederick N. Brown  
Rhode Island Medical Journal  
106 Francis Street  
Providence, Rhode Island  
My dear Doctor Brown:

Would you mind stating in your publication that we should be glad to supply a copy of the "Pre-

liminary Report of the Commission on Medical Education" to any of your readers who may be interested in the general questions of medical education and practice? We should be glad to supply these copies without charge, and anyone desiring a copy of the report can obtain it by addressing

Commission on Medical Education  
215 Whitney Avenue  
New Haven, Connecticut.

Sincerely yours

W. C. RAPPLEYE, M.D.

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### SOCIETIES

THE RHODE ISLAND MEDICAL SOCIETY COUNCIL

May 24, 1927

The annual meeting of the Council was held May 24, 1927, with Dr H. G. Partridge in the chair.

The Council voted unanimously to ratify the vote of the House of Delegates to pay the expenses of the delegates to the New England Medical Council.

The report of the treasurer, Dr. Jesse E. Mowry was presented and accepted.

It was voted to drop the following members for non-payment of dues: Dr. G. Senerchia, Dr. B. F. McDermott.

Dr. Halsey De Wolf, chairman of the Committee on Clinical Conferences, moved that inasmuch as the conferences will probably be discontinued the funds in the hands of the Committee be turned over to the Society to be held as a special fund for later disposition. It was so voted.

On motion of Dr. De Wolf, seconded by Dr. Mowry it was moved that the Librarian's salary be increased by \$3.00 per week. So voted.

Adjourned.

J. W. LEECH, *Secretary*

## TREASURER'S ANNUAL REPORT, 1926

## EXPENDITURES

Collations and Annual Dinner Expenses.....	\$741.63
Expenses of Secretary (Sec. hire).....	75.00
Stenographer at Meetings.....	20.00
Printing and Postage.....	153.48
Gas .....	40.51
Electricity .....	72.03
Fuel .....	417.50
Telephone .....	93.28
City Water .....	19.41
House Supplies and Expenses.....	330.31
House Repairs .....	802.52
Librarian .....	1,404.00
Janitor .....	600.00
Journals (Ely Fund).....	73.75
Books .....	57.00
Rhode Island Medical Journal.....	406.00
Safe Deposit .....	5.00
Treasurer's Bond .....	25.00
Delegate to American Medical Association....	100.00
Expenses Legislative Committee.....	45.24

\$5,481.66Cash on Hand to Balance.....2,175.73\$7,657.39

1926.

Jan. 1. Chase Wiggin Fund	
By Indebtedness to Rhode	
Island Medical Society	\$6,892.21
	<u>\$6,892.21</u>

1926.

Jan. 1. H. G. Miller Fund	
By Indebtedness to Rhode	
Island Medical Society	\$5,359.10
Interest .....	250.00
	<u>\$5,609.10</u>

1926.

Jan. 1. J. W. C. Ely Fund	
1 Bond So. California	
Edison Co. ....	\$980.00
Interest on same.....	50.00
8 Shares Mechanics Na-	
tional Bank Stock.....	480.00
Interest on same.....	24.00
	<u>\$1,534.00</u>

1926.

Jan. 1. Endowment Fund	
May 24. Sold Saline Electric Co.	
1st Mort. 6%.....	\$2,000.00
Accrued Interest March 1	
to May 25.....	28.00
	<u>\$2,028.00</u>

May 24. Purchased Okla. Gas &	
Elec. 1st Mort. 5%...	\$1,920.00
Accrued interest on same	
Mar. 1 to May 25.....	23.33
Balance from sale and	
purchase of bonds.....	84.67
	<u>\$2,028.00</u>

2000 Okla Gas. & Elec	
Co., 1st Mort. 5%.....	\$1,920.00
Balance from sale and	
purchase of bonds.....	84.67
Cash on hand.....	1,102.58
Bank Interest .....	51.15
	<u>\$3,158.40</u>

## RECEIPTS

Cash on Hand January 1, 1926.....	\$2,197.22
Annual Dues .....	4,020.00
Donations .....	1,018.75
Ely Fund .....	74.00
Harris Fund .....	295.00
Interest on Daily Balance.....	52.42

\$7,657.39

May 21, 1927.

Examined and found correct.

EMERY M. PORTER

JOSEPH C. O'CONNELL

1927.

Jan. 1. Chase Wiggin Fund	
To Loan Rhode Island	
Medical Society .....	\$6,892.21
	<u>\$6,892.21</u>

1927.

Jan. 1. H. G. Miller Fund	
To Loan Rhode Island	
Medical Society .....	\$5,359.10
Rent H. G. Miller Room.	250.00
	<u>\$5,609.10</u>

1927.

Jan. 1. J. W. C. Ely Fund	
1 Bond So. California	
Edison Co. ....	\$980.00
8 Shares Mechanics Nat.	
Bank Stock .....	480.00
Paid R. I. Medical So-	
cietiy (For Journals) ..	74.00
	<u>\$1,534.00</u>

1927.

Jan. 1. Endowment Fund	
Cash on Hand.....	\$1,238.40
Oklahoma Gas & Electric	
Co. ....	1,920.00
	<u>\$3,158.40</u>



1926.			
Jan. 1.	Printing Fund		
	By Indebtedness to Rhode Island Medical Society	\$1,677.52	
			\$1,677.52

1926.			
Jan. 1.	E. M. Harris Fund		
Oct. 5.	Sold Ohio Service Co. 1st Mort. 6% .....	\$2,061.44	
	Accrued Interest May 1 to Oct. 6th.....	51.67	
		\$2,113.11	
Oct. 5.	Purchased Iowa Power & Lt. Co. 1st Mort. 5½% .....	\$2,050.00	
	Accrued Interest May 1 to Oct. 6.....	47.36	
	Balance from sale and purchase of bonds.....	15.75	
		\$2,113.11	
	1000 Pacific Gas & Electric Co. ....	\$1,000.00	
	Interest on same.....	60.00	
	2000 Southern Illinois Light & Power Co....	2,000.00	
	Interest on same.....	120.00	
	2000 Iowa Power & Light Co. ....	2,050.00	
	Interest on same.....	55.00	
	Interest Ohio Service Co. Nov., 1925 to May, 1926	30.00	
	Balance from sale and purchase of bonds.....	15.75	
			\$5,330.75

1927.			
Jan. 1.	Printing Fund		
	To Loan Rhode Island Medical Society .....	\$1,677.52	
			\$1,677.52

Jan. 1.	E. M. Harris Fund		
	1000 Pacific Gas & Elec. Co. ....	\$1,000.00	
	2000 So. Illinois Light & Power Co. ....	2,000.00	
	2000 Iowa Power & Light Co. ....	2,050.00	
	Paid Rhode Island Medical Society for Repairs on Building .....	280.75	
			\$5,330.75

May 21, 1927

Examined and found correct.

EMERY M. PORTER  
JOSEPH C. O'CONNELL

## HOUSE OF DELEGATES

May 24, 1927

The annual meeting of the House of Delegates was called to order May 24, 1927, at 5 P. M. by the President, Dr. H. G. Partridge.

The minutes of a special meeting were read by the Secretary and adopted.

The election of officers for the year 1927-28 followed with the following result:

President, Dr. Norman MacLeod, Newport; First Vice President, Dr. A. H. Harrington; Second Vice President, Dr. Frank T. Fulton; Treasurer, Dr. Jesse E. Mowry; Secretary, Dr. J. W. Leech.

Committee on Arrangements—Dr. Guy W. Wells, Dr. Wilfred Pickles, Dr. Isaac Gerber, Treasurer *ex off*.

Committee on Legislation—Dr. H. E. Harris.

State and National—Dr. C. H. Holt, Dr. C. F. Gornly, President and Secretary *ex officio*.

Committee on Library—Dr. J. G. Walsh, Dr. J. A. Mack, Natick; Dr. J. E. Donley.

Committee on Publication—Dr. F. N. Brown, Dr. C. W. Skelton, Dr. Alexander C. Sanford, Newport; President and Secretary *ex officio*.

Committee on Education—Dr. E. H. Wing, Dr. R. M. Lord, Dr. Edward V. Murphy, Newport; President and Secretary *ex officio*.

Committee on Necrology—Dr. Stanley Sprague, Dr. W. P. Davis, Dr. T. F. McLaughlin, Woonsocket.

Curator—Dr. C. D. Sawyer.

Auditor for 2 years—Dr. G. W. Barden.

Delegate to A. M. A. for 2 years—Dr. Roland Hammond.

Alternate delegate to A. M. A., 2 years—Dr. P. Williams.

The report of the Council was read by the Secretary and the recommendations contained therein were adopted.

The following annual reports were presented.

*Annual Report of the Secretary*  
1926-1927

I submit herewith the annual report of the Secretary upon the state and activities of the Rhode Island Medical Society for the year 1926-1927.

The House of Delegates has held its regular and one special meeting during the year and the Council met in November to consider the budget.

The Society held its September meeting at the State Hospital for Mental Diseases as the guests of The State Public Welfare Commission. The December and March meetings were held at the Medical Library and attendance attested the excellent character of the programs offered.

The membership roll of the Society to date comprises: Active members, 420; non-resident, 27; honorary, 8. This shows a gain of 14 over the active membership of the preceding year.

The Committee on Necrology will present memorial upon deceased members at the annual meeting and therefore this report will confine itself to a statement of the loss which the Society has suffered by deaths among its Fellows this year: Dr. F. G. Phillips July 25, 1926, Dr. G. T. Spicer July 26, 1926, Dr. F. L. Day September 21, 1926, Dr. F. I. Payne January 2, 1927, Dr. Jacob C. Rutherford February 15, 1927, Dr. Jas. A. King April 22, 1927, Dr. Geo. P. Bertholet April 21, 1926.

The Clinical Conferences initiated during the previous administration have been continued during this year with certain modifications.

Delegates from the Society to the New England Conference of Medical Societies attended the Boston Conference in February. This association bids fair to be a source of great helpfulness in solving some of the problems common and peculiar to medical practice in New England.

The question of state medical societies defending its members in malpractice suits is occupying the attention of a considerable proportion of physicians throughout the country and I would urge the desirability of the Delegates and Fellows seriously considering this subject as to its practicability in this Society.

In closing I wish to pay my respects to the interest and activities of the officers, members of the House of Delegates, Council and Committees in prosecuting the work of the Society the past year.

Respectfully submitted

J. W. LEECH, M.D., *Secretary*

HOUSE OF DELEGATES

*Report of the Chairman of the Board of Trustees*

May 24, 1927

During the year following repairs have been made: The main hallway and lavatories have been painted. Other necessary minor repairs have been made: reburnishing lighting fixtures, rebronzing radiators and repairing plastering. The above work was done by W. J. Crawley.

By order of the City, portions of the sidewalk on Francis and Hayes Streets were repaired under contract with the United States Concrete & Roofing Company.

Several medical and welfare organizations, as authorized by the Trustees, have held meetings to the number of 14 in the Library Building.

The walls of the Medical Library have been enriched by the hanging thereon of the portrait of Dr. Charles V. Chapin.

ARTHUR H. HARRINGTON

*Report of the Chairman of the Committee of Arrangements*

The Committee on Arrangements of the Rhode Island Medical Society reports that collations were provided at the December and March meetings of the Society. Our September meeting was held at the State Hospital for the Insane at Howard by invitation of Dr. A. H. Harrington.

Lunch will be served at the Library on the day of our annual meeting June 2nd, 1927, and plans for the banquet that evening are progressing satisfactorily.

ELIOT A. SHAW, *Chairman*

*Report of the Legislative Committee for 1927*

As the 1927 Rhode Island Legislature convened it was very evident that little legislation would be passed unless for political expediency. Accordingly the Legislative Committee of this body decided to strengthen itself by co-operating with the State Board of Health and not as in former years fight its battles for medical welfare bills alone. In fact our attorneys advised this method of procedure.

Meetings of the Committee were held at various times by itself and with the President and Secretary of the State Board of Health, at which times medical measures before the Legislature were considered and passed upon.

Dr. Richards of the State Board of Health and Dr. Hamlin, a member of the Senate Judiciary Committee, were our lobbyists and both worked incessantly and vigorously for all health measures that would tend to make our Commonwealth a safer, cleaner and healthier State in which to reside.

As during the past 12 years, the chiropractors were on hand in larger and more powerful numbers than ever before. The complexion of the House and Senate had been materially changed by the preceding election. The many new members proved fertile fields for chiropractic propaganda.

Finally at the closing hours of the last night, after Senate Bill No. 94, Substitute A, licensing chiropractors to practice, introduced by Mr. Whitehouse of Newport, was passed, and when it was evident that some chiropractic regulation must be put on the statute books—Senate Bill No. 136 was introduced by Dr. Hamlin and passed. This latter bill was very stringent and would have allowed chiropractors to practice only after passing practically the same examinations as those taken by regular medical men and demanded practically the same high standard requirements for admission.

The former bill was signed by the Governor last and this automatically repealed everything inconsistent in Acts already passed.

At present:

Chiropractic Act. Practitioners of chiropractics furnishing satisfactory evidence to the Board of Examiners in Chiropractic of having been in practice for a period of seven years as their sole occupation are to be granted certificates. Chiropractors having been in practice five years continuously and as their sole occupation must present evidence of graduation from a chiropractic college recognized by the Examining Board of Chiropractic. The Board of Examiners in Chiropractic have authority to pass upon the standing of chiropractic colleges, and graduates coming up for examination must submit to the necessary rules and regulations of the Chiropractic Board which have not as yet been adopted.

A new bill for the osteopaths was adopted. This Act allows the holder of a certificate of osteopathy to practice the same as medical physicians, with the exception of major surgery, and also provides that if an osteopath after having passed a satisfactory examination can present evidence that

he has served one year's internship in an accredited hospital he will be on the same status as a medical practitioner.

Finally our own Medical Practice Act was strengthened. This amended law makes changes as follows: requires American citizenship or intention; more fully defines the practice of medicine; raises the penalty and allows this Board to suspend, as well as revoke, licenses.

Thus our representatives are today flattering themselves and relieving their consciences with the fact that the regular medical practitioners, the osteopaths and the chiropractors have all been recognized and yet properly restricted.

The Workmen's Compensation Act so far as it affects the medical profession stands unchanged although there was an attempt made to alter this.

House Bill 604 passed—RESOLUTION Making an Appropriation to Carry Out the Purposes of Chapter 618 of the Public Laws passed at the January Session 1925, Entitled "An Act Providing for the Acceptance of an Act of Congress, Entitled an Act for the Promotion of the Welfare and Hygiene of Maternity and Infancy and for other Purposes and Making an Appropriation Therefor."

House Bill 902—Passed—"Of the State Board of Health" defining the duties of its members and designating its Secretary, Commissioner of Public Health.

House Bill 809—Passed—entitled "Of the Powers of, and of Suits by and against, Towns."

It allows towns and cities to appropriate money for child welfare work.

Also certain towns were granted small appropriations for district nursing.

Thus it will be seen that little medical legislation resulted outside of the amendments and bills regulating medical practice.

Respectfully submitted

HERBERT E. HARRIS

CHARLES H. HOLT

CHARLES F. GORMLEY

*Report of Committee on Library*

May, 1927

House of Delegates

R. I. Medical Society:

I have the honor to submit the following report.

During the past year we received from the estate of Dr. Frank L. Day 304 bound volumes and many unbound journals.



From the Misses Collins 18 bound volumes from the library of the late Dr. George L. Collins.

From Mrs. Frank I. Payne of Westerly a surgery published in London in 1763, given to us in accordance with the wish of the late Dr. Payne.

Books added during the year: Gifts 402, purchased 7, bound 120.

The binding was paid for by money voted for that purpose by the Providence Medical Association. A new bookcase has been installed in the reading room.

The books from Dr. Day's library include a Nelson's Loose Leaf Medicine. In view of the small number of new books which can be purchased by our very limited funds it would seem wise to keep up the subscription for the current leaves and your committee so recommends.

Respectfully submitted

C. S. WESTCOTT, *Chairman*  
*Committee on Library*

*Report—Committee on Publication*

May, 1927

Mr. President and Gentlemen:

I beg to submit herewith the yearly report of the Publication Committee of the Rhode Island Medical Journal. There have been no appreciable departures from the usual executive activities in the past year, the one outstanding feature was the dedication of the March number to our honored colleague, Dr. Charles V. Chapin, the echoes of which are still heard in the lay and medical literature of the world.

We have been, thanks to the unflagging zeal of our business manager, possibly more prosperous than in the preceding year, the net income exceeding our expenditures by nearly \$300.00.

Of the literary administration, there are three potent factors that enter the problem of the publication of this JOURNAL.

They are that of editorials, of papers read before the Society presumably for publication, and the reviewing of books. I must speak frankly, Mr. President, but I speak without offence, in what seems to be an annual complaint. Of the first, the attitude of indifference of some (not all) of our associates is a matter of some concern and often embarrassment. This is one of the difficulties of trying to conduct a business enterprise upon a

non-business principle; as for the attitude, it is not easily understood.

Of the second I would call attention to that portion of the by-laws of our Society that states that all papers read before it are the property of the Society. Too often, however, the paper does not find its way either into the Secretary's hands or of the Editor's; not only does the JOURNAL lose a valuable contribution but its readers lose what might be an edifying or helpful article.

Books for review are invariably sent to those especially qualified to speak or write upon the given subjects and these books are considered the property of the Society; it would hardly be accepted in any community as justice for the book to be accepted and not re-appear or be returned, or to the publishers if the review was not forthcoming, but both of these delinquencies have happened; this is most regrettable inasmuch as the quality of the books presented for review are in direct proportion to the courtesy extended to them; therefore the library faces a loss and the publishers a needless offence.

Finally it might be said that it would be most difficult to raise the general standard of the RHODE ISLAND MEDICAL JOURNAL without the whole-hearted co-operation of the individual members of the Society.

Tabloid financial report attached.

Respectfully submitted

FREDERICK N. BROWN  
*Chairman*

*Financial Report 1926 R. I. Medical Journal*

May 17, 1927

Receipts .....	\$4,241.15
Expenses .....	3,943.42
Net income .....	\$297.73
Balance in Bank Jan. 1, 1927 .....	\$895.31

C. W. SKELTON, M.D.  
*Business Manager*

*Report of the Committee on Education*

May, 1927 -

This committee has arranged for 19 radio talks which were given from Station WJAR. The Outlet Company representatives have been very obliging in co-operating with us. We attempted to

choose subjects, the discussion of which would help to educate the public in personal hygiene. We also had in mind the importance of increasing the public knowledge of modern medicine and what the doctor is doing and trying to do. We tried to avoid giving details of the treatment of disease, and instead emphasized the methods of prevention. We believe that this means of popularizing medical facts is well worth while.

Another function of the Educational Committee should be the spreading of knowledge among the members of the medical profession of the state. We have considered the advisability of from time to time sending out in letter form short statements on current problems, written by some physician who is qualified to write on that subject. The American Medical Association furnishes information as to what other state societies are doing along these lines.

We take this occasion to thank in the name of the Rhode Island Medical Society the men who have given the excellent health talks this year.

The following is the list of the radio talks given.

	1926
The Health Department	Oct. 29
Dr. Charles V. Chapin	
First Aid	Nov. 4
Dr. John F. Kenney	
What the Health Department Does	Nov. 12
Dr. Eugene P. King	
Abdominal Pain	Nov. 19
Dr. F. A. Asserson	
Prenatal Care	Nov. 26
Dr. I. H. Noyes	
Common Colds	Dec. 3
Dr. F. B. Sargent	
Periodic Health Examination	Dec. 17
Dr. J. L. Wheaton	
	1927
Headache and Headache Powders	Jan. 7
Dr. C. S. Westcott	
Tuberculosis in Children	Jan. 14
Dr. John I. Pinckney	
Cancer	Jan. 21
Dr. Edward L. Myers	
Poisons	Feb. 4
Dr. Carl D. Sawyer	
Patent Medicines	Feb. 11
Dr. Frederick N. Brown	
Sunlight	Feb. 25
Dr. Maurice Adelman	
School Child	March 4
Dr. Charles B. Lewis	
The Baby's Food	March 11
Dr. William H. Jordan	
The Prevention of Heart Disease	March 18
Dr. Guy W. Wells	
Constipation	March 25
Dr. C. C. Dustin	

Diphtheria Immunization	April 1
Dr. Joseph Smith	
Adult Tuberculosis	April 8
Dr. H. L. Barnes	

Respectfully submitted

WM. P. BUFFUM, *Chairman*

### *Report of the Committee on Necrology*

May, 1927

The following members of the Rhode Island Medical Society have died during the past year:

Dr. Geo. P. Bertholet,	April 21, 1926
Dr. Frederick G. Phillips,	July 25, 1926
Dr. Geo. T. Spicer,	July 26, 1926
Dr. Frank L. Day,	Sept. 21, 1926
Dr. Frank I. Payne,	Jan. 22, 1927
Dr. Jacob C. Rutherford,	Feb. 15, 1927
Dr. James A. King,	April 22, 1927

Respectfully

PETER P. CHASE, *Chairman*

### *The Doctor Walter Reed Memorial Fund Committee Report*

The members of the committee appointed by President Dr. Herbert G. Partridge were: Dr. Arthur T. Jones, chairman; Dr. F. Fulton, Dr. C. D. Sawyer, Dr. C. L. Philips, Dr. F. B. Sargent, Dr. H. L. Johnson, Dr. W. F. Flanagan, Dr. W. C. Gordon, Dr. M. B. Milan, Dr. R. C. Robinson.

A meeting of the committee was called for 5 P. M. February 21. Present, Drs. Jones, Gordon, Fulton, Milan.

Dr. Carl D. Sawyer was elected Secretary-Treasurer.

It was voted to send a letter to each member of the Society asking for a contribution of \$1.00 from each member who was disposed to contribute. Also that an announcement be made at the next meeting of the Rhode Island Medical Society, also the Providence Medical Society asking any members present who wished to contribute to do so at that meeting.

A letter was formulated which was sent to each member of the Society asking for a contribution of \$1.00 from each member who was disposed to contribute. In response to this letter the Treasurer has in the bank on deposit after paying the expense of printing and mailing \$117.44. This amount will be turned over to the Central Committee in due time.

A communication from the Central Committee stated that they were to meet in Washington during the A. M. A. meeting and that this committee would be informed of what took place and of the plans for future work.

ARTHUR T. JONES, *Chairman*

*Committee on Clinical Conferences*

May, 1927

The Clinical Conferences held during the fall season, namely from October until January, were fairly well attended, though not so well as in the previous year. The highest number present at a clinic was 25, as against the highest number of the previous year, namely 39. The average number for the clinics held in 1926-27 was 5.5, as against 11.9 in 1925-26.

Whereas the showing last year was somewhat encouraging, indicating that the general medical profession of the state took interest, this year the personnel of those attending the clinics was largely composed of members of the hospital staffs, and very little of physicians not connected with the hospitals.

The clinics, as a rule, were of the highest order, and invariably gave much of value to the listeners. In many instances, the clinicians had prepared for many days ahead, gone to much trouble to collect clinical material, and in several cases, considerable personal expense.

To all these men, this Committee is most grateful, and feels convinced that, where attendance may have been poor, those present received ample return for the time spent, and moreover that the clinicians themselves profited by their efforts.

In view of these facts your Committee feels it has been definitely shown the present method of conducting Clinics is not successful. One purpose, however, has been attained in that the medical men of the state must realize that the clinical facilities of the various hospitals were thrown open for their instruction and benefit, had they cared to take advantage of the opportunity offered.

Your Committee believes that some good also has been accomplished by presenting this considerable number of well conducted clinics to even the relatively small group which attended.

Suggestion is made that, having shown that the method used in presenting the clinics was not attractive enough to insure a considerable attendance, some other method of holding clinics in the

future may be advisable. Possibly a clinic week could be selected at some favorable time in the year, during which the most eligible men in the several hospitals might hold clinics with special emphasis on subject matter, especially that which is new and unfamiliar.

Your Committee now respectfully requests that it be discharged.

Signed

HALSEY DE WOLF

*Report of Committee on the Chapin Testimonial*

The Committee appointed by the President of the Rhode Island Medical Society to offer a suitable testimonial in honor of Dr. Charles V. Chapin, begs to report that after due deliberation and consideration it was decided to have a portrait of Dr. Chapin painted by William C. Loring and to show honor to Dr. Chapin by having this portrait presented to the Medical Society to be hung permanently on its walls and to have an address delivered by a well known man of science, who would best appreciate his great work in public health matters.

At such a meeting held on the evening of January 17, 1927, at the Medical Library the President of the Society, Dr. H. G. Partridge, introduced Dr. John M. Peters, Chairman of the Committee to unveil the portrait, which was accepted in behalf of the Society by Dr. Partridge, who then introduced as master of ceremonies, Dr. G. Alder Blumer, who, with his usual wit, wisdom and eloquence expressed the feelings of the members of the Society of their appreciation of Dr. Chapin and later introduced the speaker of the evening, Dr. George E. Vincent of the Rockefeller Foundation.

Dr. Vincent's remarkable address will never be forgotten by those fortunate enough to be present and expressed in words what many of us have felt and appreciated in Dr. Chapin as a man and as a public health officer and which we have never had a chance to express to him personally.

The friendly greetings offered to Dr. Chapin after the exercises and the good fellowship shown by all closed a very unusual evening in the history of the Rhode Island Medical Society.

Respectfully submitted,

DR. J. E. MOWRY

DR. J. C. O'CONNELL

DR. C. W. SKELTON

DR. J. M. PETERS



*The New England Medical Council*

May, 1927

At the suggestion of Dr. D. L. Parker, President of the New Hampshire Medical Society, there was held in Boston in November last, a meeting of representatives of all the state medical societies of New England, looking to the formation of an ex parte committee which should consider various matters of interest common to all the states. The plan was based upon the New England Conference of Governors, the thought being that the New England states were a group by themselves, with like problems and like thoughts, and that a discussion of these problems by men from the different states one with another might be of much value.

The plan has been endorsed by each medical society, including our own, as you know, and the organization has been completed with Dr. Parker as President, Dr. W. P. Bowers of Boston as Secretary, and an Executive Committee composed of Drs. Parker, Bowers and Partridge. The name adopted is The New England Medical Council. There are five delegates from each Society, including in each case the President and Secretary of the Society. From our Society the delegates in addition to the President and Secretary are Drs. Frank T. Fulton, Frederick N. Brown and Lucius C. Kingman.

It is not intended that the Council shall act in any executive capacity, but shall rather be an advisory board, and a common meeting place for the thoughts of men who come from all parts of New England.

It is planned to hold two or three meetings each year, and at each of them to discuss some question of interest to all. The delegates will then report to their respective societies the results of the conference.

A meeting was held in Boston in January last, at which the subject of insurance against suits for malpractice was considered, and it was voted that it was the sense of the Council that the primary move in each state is the formation of a proper committee to handle the medical defense work against malpractice, and that the Council recommend a form of medical defense similar to that now in operation in the State of Maine.

The next meeting of the Council is to be held in Boston on June 9th, at which time the subjects

for consideration are Medical Education, and the Distribution of Physicians.

H. G. PARTRIDGE

May 24, 1927

On motion of Dr. Mowry, seconded by Dr. De Wolf, it was voted to fix the annual dues for the ensuing year at \$10.00.

An invitation from the Trustees of the Rhode Island Hospital inviting the Rhode Island Medical Society to hold its meeting at the Crawford Allen Memorial Hospital, East Greenwich, R. I., September 1, 1927, was unanimously accepted with thanks.

A communication from the Bureau of Legal Medicine and Legislation of the American Medical Association relative to the amendment of changes and rulings in the National Prohibition Act and the Harrison Narcotic Act was read by the Secretary and it was voted that the Secretary be instructed to answer the same.

Adjourned.

J. W. LEECH, *Secretary*

## ANNUAL MEETING

The 116th Annual Meeting of the Rhode Island Medical Society was held at the Medical Library, Thursday, June 2, 1927.

The morning session was called to order at 10:30 A. M. by the President, Dr. Herbert G. Partridge.

The minutes of the March meeting, of the annual meetings of the Council, and the House of Delegates were read by the Secretary.

As delegates from the Massachusetts Medical Society, Dr. W. L. Breed, Boston, and Dr. Reginald Fitz, Boston, were introduced by the chair.

Dr. Wm. Holt, Portland, Me., brought the greetings of the Maine Medical Association as delegate.

Dr. Eric Stone, Secretary of the Fiske Fund, made the annual report of the Fund. No essays were submitted for 1926-27, therefore, no award could be made. The subject for the essay for 1927-28 was announced to be "The Diagnosis, Etiology and Pathology of Epidemic Encephalitis." For the best essay on this subject a prize of \$250.00 will be awarded.

Dr. Peter P. Chase, chairman of the Committee on Necrology presented obituaries upon deceased members.

The report of the Delegate to the American Medical Association, Dr. Hammond, upon the activities of the National House of Delegates was presented.

The following papers were then presented:

1. "Prenatal Problems," illustrated by moving pictures, Dr. Paul Appleton, Providence, R. I. Discussion by Drs. I. H. Noyes, Fritz Talbot, Boston, and W. L. Breed, Boston.

2. "Hyperesthetic Rhinitis," Dr. Francis B. Sargent, Providence, R. I. Discussion by Dr. F. M. Adams.

3. "The Ketogenic Diet in the Treatment of Epilepsy in Children," Dr. Fritz B. Talbot, Boston, Clinical Professor of Pediatrics, Harvard Medical School. Discussion by Drs. H. G. Calder, Reginald Fitz, Boston, and E. H. Wing. Luncheon was served in the Medical Library Building at 1:45 P. M.

The afternoon session was called to order at 2:30 P. M. by the President. The following papers were presented:

1. "Dentistry as the Medical Profession Sees It," Ernest S. Calder, D.D.S., Providence. Discussion by Drs. J. W. Leech and J. E. Donley.

2. "Observations on Blood Pressure," Dr. Wm. E. Preble, Boston. Discussion by Drs. C. S. Westcott, Frank Cummings and J. J. Walsh, New York.

3. "Some Important Problems on Injuries of Bones and Joints in the Upper Extremity," Dr. T. Turner Thomas, Philadelphia, Associate Professor Applied Anatomy, University of Pennsylvania. Illustrated by lantern slides. Discussion by Dr. Roland Hammond.

4. "What the Mind Does to the Body," Dr. James J. Walsh, New York, Professor of Physiological Psychology, Cathedral College, New York. Discussion by Dr. W. E. Preble, Boston, and Dr. Kelly.

The annual address of the President was delivered by Dr. H. G. Partridge.

The newly-elected President, Dr. Norman McLeod of Newport, R. I., was then inducted into office. After a brief speech of acceptance, Dr. MacLeod adjourned the meeting to re-assemble at the Providence Biltmore Hotel for the annual banquet at which Dr. Lucius C. Kingman presided as Annual Chairman, and introduced Prof. George

Pierce Baker, Director of the University Theatre, and Professor of the Drama, Yale University, whose subject was "Forty Years of the American Theatre—A Retrospect."

Adjourned.

J. W. LEECH, *Secretary*

#### PROVIDENCE MEDICAL ASSOCIATION

The regular monthly meeting of the Providence Medical Association was called to order by the President, Dr. Henry J. Hoyer, Monday evening, May 2, 1927, at 9:05 P. M.

The reading of the records of the last meeting were omitted.

Dr. Alex M. Burgess reported two cases of pneumonia treated with serum with apparently immediate crises. The first was type 2, a 35-year old man and the second, a seven-month pregnant woman. X-ray of this case showed consolidation appearing after the crises.

Dr. Wilfred Pickles showed a case of suture of the musculo-spiral nerve with good function.

The paper of the evening on acute Intestinal Obstruction was read by Dr. George A. Moore of Brockton, Mass. This is still an unsolved problem as proven by the statistics which still show a tremendous death rate.

Dr. Moore presented the clinical point of view discussing different types and giving illustrative cases. He felt that the problem of diagnosis was largely on the shoulders of the general practitioner who sees first 90% of these cases, many of these being far advanced because of the ignorance of the laity. In treatment the combating of dehydration was emphasized and the use of saline and glucose and at times lavage of the stomach before operation. Local anesthesia is ideal when it can be used. He also discussed many details of operative treatment. Dr. Richard H. Miller of the Massachusetts General Hospital opened with an admirable discussion emphasizing especially promptness and expedition in operating. The paper was also discussed by Drs. Cooke, Jones, McKenna, Houghton and Moore.

The meeting adjourned at 11:05 P. M. Attendance 61. Collation was served.

Respectfully submitted

PETER PINEO CHASE  
*Secretary*

The regular monthly meeting of the Providence Medical Association was called to order by the President, Dr. Henry J. Hoye, Monday evening, June 6, 1927, at 8:55 P. M. The minutes of the last meeting were read and approved.

The Standing Committee having approved the applications for membership of the following, Howard F. Keefe, Frank W. Dimmitt they were elected.

The paper of the evening was read by Dr. Jerome M. Lynch, Professor of Intestinal and Rectal Surgery, New York Polyclinic Medical School and Hospital on "Surgery versus Radium in Carcinoma of the Rectum."

The accessibility of these sites should make diagnosis easy but cases average nine months before discovery.

After short remarks on the cause and frequency of cancer, he showed slides illustrating the development of tumors, specimens, location and diagram of removal. Patients may live for three to five years without other treatment than colostomy; this should be remembered in considering the result of radio-therapy. He considers the surgical treatment far superior in results and radiation may cause great pain.

The discussion was opened by Dr. John W. Keefe. He stressed the importance of rectal examination. The discussion was also taken part in by Drs. Cooke, Jones, Chase and Lynch.

J. H. Schriever, Sc.D., spoke on the manufacture of diphtheria anti-toxin and showed an interesting series of moving pictures illustrating this and other similar processes.

Dr. Parnell E. Fisher read an obituary on Dr. Jacob Chase Rutherford. It was voted that this be spread on the records and a copy sent to the family.

The meeting adjourned at 10:50 P. M. Attendance 80. Collation was served.

Respectfully submitted

PETER PINEO CHASE  
*Secretary*

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#### PAWTUCKET MEDICAL ASSOCIATION

The May meeting of the Pawtucket Medical Association was held on May 19, 1927, at the Pawtucket Golf Club House.

The speaker of the evening was Dr. Herbert E.

Harris of Providence. His subject was "Pagets and Allied Bone Diseases."

Following discussion of paper a collation was served.

LESTER J. GILROY, M.D.  
*Secretary*

The April meeting of the Pawtucket Medical Association was held at the Jack-o-Lantern, 33 Summer Street, Pawtucket, on April 21, 1927.

Dr. J. L. Wheaton submitted the report of the Banquet Committee, which was approved.

The speaker of the evening was Dr. Roy Blosser of Providence. Subject: "Common Skin Diseases and Treatment."

A vote of thanks was given Dr. Blosser for his paper.

Under new business, Dr. J. L. Wheaton stated that the Association had been offered the use of the Pawtucket Golf Club House for their monthly meetings. It was voted that if the Standing Committee offered no objection the Association would hold the next two meetings at the Golf Club House.

Meeting adjourned and collation served.

LESTER J. GILROY, M.D.  
*Secretary*

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The Washington County Medical Society quarterly meeting was held at the Elm Tree Inn, Westerly, Wednesday morning, April 13, 1927, with sixteen present.

Following routine business: a paper on "Interpretation of Bladder Symptoms in Women" was presented by Dr. Ira H. Noyes, of Providence.

Adjourned and dined,

W. A. HILLARD, M.D.  
*Secretary*

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#### OBITUARY

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##### DR. JACOB CHASE RUTHERFORD

Dr. Jacob Chase Rutherford died suddenly in Providence, February 14, 1927.

He was born in Derby Line, Vermont, on January 29, 1857. His father, Dr. Joseph Rutherford, served for three years as surgeon during the Civil War, and practiced his profession for many years thereafter in Newport, Vt., until he retired owing to the infirmities due to old age.



Dr. Rutherford attended the Medical School of the University of Vermont and during his entire course served as assistant to Professor Darling, a noted anatomist of that time. He graduated in 1882 and began practice in Burlington. He associated himself at once with the Mary Fletcher Hospital in Burlington, serving on the surgical and gynecological staff. During his stay in Burlington he was surgeon-general of the State of Vermont under Governor Carrol S. Page. In 1887 he went to London and worked eight months in St. Thomas Hospital doing most of his work in gynecology.

He was married in 1887 to Polly Ballou, daughter of the late Daniel Ballou, who survives him. He decided to remove to Providence in 1893. He practiced here doing general work with a larger amount of surgery and gynecology. For many years he served as examiner and expert witness for the railroad interests of the State.

He retired from active practice in 1921 and removed to Wakefield, R. I., where he lived until his death.

He was President of the Providence Medical Association in 1910. He was on the consulting staff of the Rhode Island Hospital and after his removal to Wakefield became much interested in South County Hospital. When he was not on the active staff he was prevailed upon to accept the position of Chairman of the Staff Association. He was a member of the Rhode Island Medical Society, Providence Medical Association and the American Medical Association. He was a member of the Loyal Legion and a 32d degree Mason. Dr. Rutherford was a very genial character and leaves behind him many devoted friends and patients.

PARNELL E. FISHER, M.D.

JAY PERKINS, M.D.

PEARL WILLIAMS, M.D.

## BOOK REVIEWS

### METHODS IN SURGERY

By Copher

C. V. Mosby Co., St. Louis, Publishers

This book deals quite exhaustively with hospital routine, giving considerable attention to history taking, physical examination and X-ray routines.

The book covers the special phase of surgery, more particularly routine of genito-urinary, neuro-surgical and gynecological cases.

There is one chapter devoted to surgical ward routine, another chapter covering briefly but concisely operating room routine. Also a chapter captioned "Suggestions for Special Conditions and Diseases," under which heading, treatment of shock, helpful aids in the diagnosis and treatment of acute surgical abdominal diseases, goiter, empyema, etc., are all covered well. In this chapter are mentioned the most important signs and procedures to aid one in arriving at a diagnosis. Special diets as well as routine diets for a surgical ward or hospital are listed in a helpful manner.

The book impresses one as of distinct value in bringing to mind many points which give greater aid to better diagnosis and treatment.

### THE THERAPY OF PUERPERAL FEVER

Privatdozent—Dr. Koehler—Vienna  
American Edition by

Hugo Ehrenfest, M.D., F. A. C. S.

Published by C. V. Mosby, St. Louis

In a book of 250 pages Dr. Koehler has given a most careful and thorough review of the present status of treatment of puerperal fever.

In this short space he has covered the entire field of procedures which have been tried in an effort to combat this most baffling and highly fatal condition.

His discussion of both operative and non-operative measures shows common sense and is strictly non-partial, although his attitude toward benefits to be obtained from any method of treatment is quite pessimistic.

His chapter on chemo-therapy is especially interesting to anyone who has ever used any of the variously recommended chemical dyes, antiseptics or combinations for intravenous infusions.

A complete history, literature and critique is given, although in his closing remarks the author finds very little of real value in any of the substances so far tried.

On the whole the book serves an excellent purpose in summarizing what has been done in the therapy of puerperal fever up to the present time.

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## ORIGINAL ARTICLES

### ADDRESS BY THE PRESIDENT OF THE RHODE ISLAND MEDICAL SOCIETY\*

HERBERT G. PARTRIDGE  
PROVIDENCE, R. I.

Fellows of the Rhode Island Medical Society,  
and Guests:

The Rules and By-laws of our Society stipulate that the President shall deliver an address at the annual meeting, or provide a substitute. This custom has prevailed for many years, and the address has often been a scholarly disquisition on some topic of medicine, or some subject allied thereto. But the real wisdom of providing for this word from the President was not so apparent in former years as at the present time.

Up to the date of the revision of the By-laws to conform to the plan of the American Medical Association, of District Societies, acting as the portal of entrance to the State Societies and thence to the National Association, the business of the Society was for the most part conducted in open meeting, and the Fellows heard not only the results of deliberations but the discussions concerning various matters of interest. Now, the Council and the House of Delegates transact all the business, and report to the general session. This greatly facilitates matters in the meetings, and no one would wish to go back to the former method, but it is possible that the Fellows do not have quite as full knowledge of the affairs of the Society as was in past years the case.

For this reason, while it was my first impulse to invite a speaker for the occasion, who could interest you more than could I, it seemed that a brief consideration of some of the activities of the Society by the President might be of some value.

The outstanding event of the year was the special meeting which was held on January 17, 1927, at which a portrait of our most distinguished Fel-

low, Dr. Charles V. Chapin, was presented to the Society, a gift from his many friends and admirers in the Society. It was an occasion singular in our history, for so far as I know, no Fellow has ever been honored by a special meeting. On the other hand, no Fellow of the Society has had such world wide fame; his writings and his name are known throughout the civilized world. Those of us here who have been privileged to work under him, or to seek his advice realize very keenly that he is a most inspiring teacher, and that a few minutes conversation with him is always stimulating and productive of thought. We are honored by honoring him.

At the annual meeting of the Massachusetts Medical Society, in June of last year, Dr. David W. Parker, President of the New Hampshire Medical Society, proposed the formation of an association to be made up of representatives of the various state medical societies of the New England states. His thought was based upon the New England Conference of Governors. The New England states are closely knit geographically, their problems are much the same, and the minds of the members of the different societies are much alike, and it was suggested that if these societies could in some way exchange opinions, much more uniformity of action might be obtained.

Dr. James S. Stone, President of the Massachusetts Medical Society, presented the matter to his body, and it was strongly favored, and since then all the New England societies, including our own, have become members of the organization, which has been called the New England Medical Council. Five men from each Society, including in each instance the President and Secretary, constitute the membership of the Council.

Two meetings have been held, in Boston, at each of which this Society has been represented, and at the last meeting, held in January, there was free discussion on the subject of insurance against suits for malpractice.

This move appears to be of real value, and the Council may conceivably become of great influence, especially as regards legislation. There are many matters which should arouse discussion,

\*Delivered at the Annual Meeting of the Society, June 2d, 1927.



such as the cults, and their regulation; medical education; the problem of nursing; reciprocity in licensure; distribution of physicians. The Council is not intended to act in any executive or mandatory capacity, but only as an advisory body,—a sort of open forum wherein the ideas of the members of the different state societies may be exchanged.

Most of the delegates who have attended the meetings already held are very enthusiastic, and I hope that this Society will enter into it heartily.

Several of the New England state societies, e. g., Massachusetts, Maine, Vermont and Connecticut, defend their members against malpractice suits in one way or another. We in Rhode Island have been singularly fortunate in that we have had few suits brought against our members. Perhaps it is due in part, as our Secretary, Dr. Leech, suggested at the last meeting of the New England Council, to the fact that we are a small society, the men know each other better than in the larger states, and there is therefore a more friendly feeling between them. But we have no assurance that our comparative immunity will be lasting, and in view of the feeling in other states of New England so strongly in favor of some form of defense of the members of the societies, it may be well for us to consider it. The general opinion seems to be that insurance sponsored by the state society acts as a very great deterrent to the bringing of suits. The legal profession recognizes the power and influence of the medical profession, when united, even if the laity does not appreciate it.

As has been stated, the matter was discussed at the last meeting of the Council, and it will without doubt be discussed again. Your delegates will keep you informed as to the results of the discussion.

Already in the comparatively short time since our building was built, we are confronted with crowded shelves in our stack. We have received a large number of books by gift, and while in some cases it might have seemed desirable to keep these collections together intact, it has not been possible to do so because of lack of room. It is likely that in the future more gifts will be received, and it will be only a few years before our shelves will be filled to capacity. The situation has been relieved to some extent for the present by removal of duplicates (of which we had a large number), but if we continue to grow as we have in the past ten

years, some thought must be given to this matter within the next ten years.

For some years, those actively interested in the Society have deplored the small attendance at the meetings. Various methods have been adopted to increase it, but apparently they have been of little avail. As a matter of fact, our attendance at any meeting is rarely much over twenty-five per cent of our membership, and it would seem that more than that small proportion, in this small state, ought to have interest enough in the state Society to attend its meetings. The only crumb of comfort to be offered in this regard is the fact that the attendance at the meetings of the Massachusetts and of the Connecticut Societies is in about the same proportion, while in New York, with a membership of 11,000 the attendance is from 500 to 1,000. I have these figures from the secretaries.

I realize, in calling your attention to this matter, that you who are listening are precisely those who need no admonition, but if each member who expects to attend a meeting would bring in or persuade another to attend, some good would be done.

I have attended meetings of district societies, and at each I have urged the members of those bodies to remember that they are also members of the State Societies, and that as such they ought to have an interest in it and attend its meetings. We should also try to impress upon the younger members of the Society, the comparative new comers, the fact that membership in the State Society is one of the greatest professional assets and that by attending the sessions, reading papers, and taking part in the discussions, they may benefit themselves, as well as others, and gain the esteem and respect of their professional associates. This leads me to say a few words regarding the participation of the Fellows in the meetings. It is an open question whether the papers should be presented mostly by visitors, or mostly by the Fellows themselves. There is no question that in our state with its fine hospitals, as fine as any in the country, there is ample material for the preparation of papers, neither is there any question that we have in our own Society numbers of men who could present to us worthwhile papers. If you look back through the Transactions of the Society, you will find that the men who read the most were the leaders of the profession in the state. Were they leaders because they were good writers also, or did

they write much because they had a large experience, and so had become prominent?

A Fellow should consider it an honor and a privilege to read before the Society, and should be glad to do so. The Committee on Scientific Work, composed of the President, First Vice President and Secretary, is always pleased to accept papers, so I beg of you not to be too modest. As it is at present, it is only rarely that any man asks to be allowed to read. This is not right, for I believe that all of us can gain much by an interchange of ideas. Is it due to fear, lack of ambition or disinclination? It is surely not due to lack of opportunity. We in this community are not teachers and are therefore not much accustomed to putting our thoughts into words, either spoken or written, but after two years of the Clinics which have been given under the auspices of the Society, there surely must have been developed some talent for expression. We may hope, therefore, that in the years to come more of our own members will volunteer to read.

The same thoughts apply in some degree to the discussions of papers in the meetings, although within the past two years there has been a very great improvement in this regard.

The clinics instituted two years ago at the suggestion of the former President, Dr. DeWolf, have been carried on during the year, with an intermission during the busy winter months. Much to the regret of all who were interested in the enterprise, the attendance has fallen off during this season, and those who did attend were largely the members of the staffs of the hospitals. In other words, the men whom we most desired to attract, the men who did not have active hospital services, did not come, and the committee in charge of the clinics has recommended that for the present the attempt be abandoned, with the hope, however, that in the future some method of utilizing the abundant clinical material in the state may be devised, which will prove more alluring to the profession at large.

Two good results have come from the effort made. In the first place, by their co-operation with our committee, all the hospitals have shown that they were ready and willing to open their doors to the medical men of the state, for instruction. This in itself is well worth while, and will promote mutual good will.

Secondly, the clinics have been of value to the lecturers themselves, for these talks have required a considerable amount of preparation, which for the man himself is of course time well spent. And this has been done carefully and thoroughly in spite of the discouragingly small attendance.

This organization is and ought to be the representative medical body of the state. As such, its influence should be felt in all medical matters. Whatever is proposed in affairs looking to the betterment of the health of the public should receive the endorsement of this Society. We should work in accord with the State Board of Health, and with the State Welfare Board, and with all other similar organizations. At present, several of our members are members of various agencies which have to do with the public health. This is eminently fitting, for these boards, made up for the most part of laymen, need the advice of the scientific man and by thus working together for the common good, each will understand the other better.

In line with this thought, I am glad to report that your Committee on Legislation has during the year held several conferences with members of the State Board of Health, regarding matters of legislation. There have naturally been some differences of opinion, but the result of these conferences has been gratifying, and they should be continued in the years to come.

We are a small state, and our Society is a small Society, but we have had a long and honorable career, and have always stood for the best things in affairs professional. Especially have we been fortunate in that we have always had a most harmonious feeling among our members, and as I have seen the district societies, it has been very evident that there was but little friction but rather a fine feeling of good fellowship, and of interest in the good of the profession. We should be very thankful for this.

I am glad to pay a tribute to the great assistance rendered me by our very efficient Secretary, Dr. Leech, who while Presidents come and go, goes on indefinitely, and always helpfully. He is always able to answer any question concerning the Society, and without him and his fund of knowledge the President would often be in a maze.

I want also to thank publicly the men who have presented papers and those who have contributed to the discussions, during the year.

In concluding my term as President I desire to express to you my profound appreciation of the honor which you have conferred upon me. It is the greatest honor which lies within the gift of the profession of the state, and I am sincerely grateful to you for your expression of confidence and regard. Greater and more to be valued than anything that can come to a medical man in his professional life is the respect of his colleagues, and I shall always feel that I have been most fortunate in having to so marked a degree the esteem of those with whom I have been associated for the past thirty years. When I read the long list of my predecessors in this office, from Amos Throop down to the present day, I am greatly impressed by my privilege to be included among them.

Finally, I venture to express the hope that in the years to come, with the greater degree of mutual understanding between the medical profession and the layman, our Society will exert an even larger influence in the community than it has in the past, and that it will go on to greater things, both in relation to matters professional, and in its helpfulness to the people of our state.

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### SOME PROBLEMS IN BONE AND JOINT INJURY IN UPPER EXTREMITY BRIEFLY CONSIDERED\*

By T. TURNER THOMAS

PHILADELPHIA, PA.

More than half the suits for damages against doctors in our courts, according to one writer, are on account of fractures and in the 22 cases in his collection decided against the doctor every one was on account of a fracture. Much has been contributed to our knowledge of fractures but much remains to be learned and much will remain to be learned probably for a long time. To the writer the most intriguing fact connected with fractures and dislocations is the typical displacement, a dislocation being merely a fracture of the skeleton with displacement of the fragments. While these typical deformities are well recognized, the usual explanation for them in fractures, muscle pull,

does not satisfy and receives little attention in the literature. The only other explanation, the fracturing force, is barely mentioned. Though neither can be proved they are all we have to explain the great, outstanding fact of typical deformities. Every surgeon knows that there is but one typical displacement for Colles fracture, the supracondylar of the humerus and that of the surgical neck as well as that of the middle third of the clavicle. Muscle pull is the only known force acting on the fragments always in the same direction, so that it is probably the only explanation for typical deformity yet available. But it has not been proved. Indeed the writer has not yet been able to find that any writer has ever tried to prove it. There is reason to believe that the fracturing force makes a stronger appeal to the minds of most surgeons, but can not have a place in the literature until it is believed that it acts almost constantly in the same direction. Otherwise it can not explain the almost constant displacement of the fragments in one direction. According to our present teaching the fracturing force may be direct or indirect and be applied in almost any direction. This eliminates the fracturing force as the cause of typical deformity.

The writer believes that it is the cause of typical deformity, and looks to the common fall for the explanation of the common force producing it. The common fall is the price the human pays for the tremendous advantage he enjoys of standing erect and developing his upper extremities for special uses. This explains why fractures and dislocations are so much more common in man, the biped, than in the quadrupeds. The use man makes of the upper extremity in breaking the force of the fall to save the more important head and trunk explains the greater frequency of fractures and dislocations in the upper than in the lower extremities.

In accounting for typical deformity we must bear in mind that the skeleton is a continuous frame work to support the remaining body structures and offers the chief resistance to the forces applied to the body. Like other frameworks the various bones are joined together firmly by the ligaments—which are as much a part of the skeleton as the bones. In the fall the ligaments sustain the same force as the bones and yield to excessive force in the same way, i. e., the ligament

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\*Read before the Annual Meeting of the Rhode Island Medical Society, June 2d, 1927.



tears and the bone breaks or rather one or the other gives way according to where the excessive force exerts its greatest effect. The best evidence of this is in the typical deformity itself. Of course, the skeleton may break through the bone or through a joint without displacement. This merely means that the fracturing force was completely spent in producing the break in the skeleton, none remaining to produce displacement of the fragments. The degree of displacement depends upon the degree of unspent force after the resistance of the skeleton has been overcome. In fractures we may have all grades of displacement from the extreme overlapping of the fragments down to the mildest deviation from the normal, but in dislocations we usually have the extreme displacement of the fragments (the involved articular bone ends) or none at all. That means that the dislocated bone ends must lock in the dislocated position or jump back to their normal positions in the socket. This must be borne in mind in judging the force of the following statements.

The proof of the cause of the deformity is in the deformity itself. The most common and most typical fractures occur in the neighborhood of the joints. For example in the shoulder region we have the very common fracture of the surgical neck of the humerus, the less common anterior or subcoracoid dislocation of the shoulder joint (but the most common dislocation in the body), the not uncommon acromioclavicular dislocation and the very common fracture of the middle third of the clavicle. To compare the deformities in all four of these common typical fractures and dislocations, here considered merely as fractures of the skeleton with displacement of the fragments, it will simplify and intensify the comparison if we imagine the humerus elevated to the same plane as the clavicle. We would then see that the typical deformity in all four is the same, i. e., the outer fragment in every one would be displaced downward and inward under the inner fragment which overlaps it. (See figure 1.) The best available explanation for this deformity is that it is the deformity of hyperabduction of the arm at the shoulder. The best evidence we have of this is that hyperabduction of the arm at the shoulder always produces a subcoracoid dislocation of the shoulder joint never any other. The subcoracoid dislocation with the arm abducted to the level and plane of the clavicle gives the deformity noted

above as common to all four of these breaks in the skeleton in the shoulder region. It can be shown that hyperabduction is the end result at the shoulder of the force of the fall on the hand. Therefore the best explanation of this typical deformity common to all the usual fractures and dislocations in the shoulder region is that they result from hyperabduction commonly due to the fall on the hand. The muscle pull theory will not explain the same deformity in all four conditions.

In the elbow region the common breaks in the skeleton and dislocation of the elbow joints are the posterior dislocation of the elbow joint and the fracture of the humerus through or just above the condyles the displacement in which is identical with that of the dislocation, i. e., in both, the lower fragment is displaced upward and backward. In the fracture this is now explained by the pull of the triceps muscle but in the dislocation the dislocating or fracturing force is held accountable. The force of the fall on the hand will best explain both.

When we come to the fractures at and just above the wrist joint we have no difficulty in establishing the responsibility of the fall on the hand as the fracturing force and the cause of the typical deformity. It has been so long accepted generally and taught in our medical schools that one would have difficulty in determining when and by whom this mechanism was originated. Although much interested and on the lookout for years the writer has not yet obtained the slightest hint as to its origin. The writer has merely been interested in the question as to how far up the limb the mechanism of the fall on the hand continues to operate. He believes that it works out all the way up to and including the clavicle.

How do these ideas affect the treatment of fractures and dislocations and do they throw any light on the obscurities associated with injuries in the shoulder region? The greatest problem in fractures is connected with the correction of deformity. Hence the voluminous discussion on the relative merits of traction and operation; and as to how much correction should be aimed at; whether a good anatomical result is necessary for a good functional result. It may be assumed that a good anatomical correction of the deformity is always desired by the surgeon and the patient. It may not be necessary to good function. It may even be true that if we could accomplish good anatomical



A



B



C



D

Figure 1. Showing typical displacement of fragments in four most common "fractures" of skeleton in shoulder region. *A.* Fractures of surgical neck of humerus, *B.* Dislocation of shoulder joint, *C.* Dislocation of outer end of clavicle, and *D.* Fracture of clavicle. In *A.* and *B.* by dotted lines, the lower fragment is elevated to the same plane as the clavicle for more easy comparison of the displacements of the fragments in all four injuries. It must be remembered that in *B.* the head of the humerus is the outer fragment and the glenoid process the inner fragment, while in *C.* the acromion process is the outer fragment and the outer end of the clavicle the inner fragment. We now see that the direction of the displacement of the fragments is the same in all four of these "fractures" of the skeleton i. e. the outer fragment in each is displaced downward and inward, the inner fragment upward and outward. The displacement in *C.* is least marked because the coracoclavicular ligaments (conoid and trapezoid) are intact and prevent more than a mild displacement of the fragments. Muscle pull can not explain the same deformity in all four, but the fracturing force can; this being the displacement due to hyperabduction which is the common fracturing force in this region.

reduction in all our fractures they would give us little worry and law suits would be very few. This applies particularly to fractures near joints where permanent deformity makes for permanent disturbance of joint function.

All muscles contract on irritation (and all fractures cause irritation by their fragments, hemorrhage and the reparative new material) and maintain the deformity after it has been produced by the fracturing force. Very little or no muscle relaxation can be obtained by any change in the position of the limb. Temporary muscle relaxation can be obtained by general anaesthesia for efforts at reduction of the deformity but disappears with the anaesthesia. Therefore to maintain the reduction afterwards sufficient traction must be applied to overcome the tendency to muscle contraction, or the limb must be placed in such a position as to bind the fractured surfaces in their reduced position. For example it is an easy matter, under general anaesthesia, to reduce the typical deformity in a supracondylar fracture of the humerus by pulling strongly on the lower fragment, which has been displaced backward and upward, by grasping the forearm at the wrist and then forcing the lower fragment forward by the fingers of the hand making countertraction on the upper fragment. If force enough has been used the reduction will be complete and the deformity can be easily kept reduced by forcing the forearm into acute flexion at the elbow and fixing it in this position by a strip of adhesive plaster around the arm and wrist or by a bandage. If in addition to the usual posterior displacement of the lower fragment, there is some inward or outward displacement of it, during the reduction one needs merely to push it in the opposite direction into its normal position. It is very important to use enough traction in the first step to overcome all muscle contraction before trying to push the lower fragment forward. Otherwise it will strike the upper fragment too soon and be blocked. The same principle applies to all reductions. This is the reason general anaesthesia is so necessary for satisfactory reductions.

Because the deformity is the result of the fracturing force the resistance of the surrounding structures; periosteum, fibrous tissue, etc., to the displacement is broken, and the line of fracture of necessity is such as to permit the displacement.

But the resistance to displacement in the opposite direction has not been broken, so that overcorrection is almost impossible. Experience proves this to be true, especially of fractures in the cancellous bone near the joints. The particular level of the fracture line matters little. But there must be first enough direct traction to overcome fully the muscle contraction and then enough force in the direction of correction as indicated by the displacement shown by the X-ray, and finally that position of the limb which will bind the fragments in reduction. All this is true because the deformity is due to the fracturing force. If the force was sufficient only to produce the fracture without deformity, no muscle or muscles could pull the fragments out of position. This is proved by the frequency with which such fractures without deformity are met with.

In practically all fractures of the radius near the wrist, regardless of the line of fracture or the number and sizes of the fragments almost if not perfect reduction is easily accomplished with general anaesthesia and a sufficient force in the reverse direction to that which produced the deformity.

Almost always in the fall the impact is received by the palm of the hand which is consequently thrust upward, backward and to the radial side. By grasping the hand with your own, pulling strongly downward, then bending to the ulnar side and then in flexion forward, in an adult with as much force as one can apply, the fragments will go back to their normal position. Use enough force and disregard overcorrection. The writer prefers to hold the hand and wrist in this forced position, palmar flexion and ulnar adduction by a light plaster cast to maintain reduction, as acute flexion of the elbow is used to hold the reduction of the typical supracondylar fracture of the humerus. It is probably not as necessary in the Colles fracture because the tendons about the fracture do not respond to the irritation and contract as do the fleshy muscles about most other fractures.

The writer prefers to employ the same principles in the reduction and fixation of typical fractures of the surgical neck of the humerus. With the patient under general anaesthesia, the affected arm in abduction, an assistant with his stockinged foot against the axillary border of the scapula, pulls as strongly as he can on the hand



and wrist of the patient, if the patient is an adult, to overcome all overlapping of the fragments. The patient lies preferably on an easily turned carriage such as is used for taking patients to the operating room, while the assistant sits on an equally high instrument table, the purpose being to move the wheel carriage when ready toward the assistant pulling on the arm which can thus be approximated to the side of the body under traction. It has seemed easier to move the body toward the arm than the arm toward the body while the traction is being made. When the traction by the assistant is at its height, the surgeon with his fist in the axilla pushes strongly outward on the lower fragment, which is displaced inward and upward inside the upper fragment, thus bringing it into approximation with the upper, and while full traction on the arm is maintained by the assistant the foot end of the wheel carriage is swung toward the assistant thus approximating the arm to the side of the body. While the surgeon after taking hold of the lower end of the humerus pulls strongly downward the assistant relaxes his pull and removes his foot from the axilla, the surgeon placing a moderate sized gauze or cotton pad in the axilla puts the forearm in the acutely flexed position across the front of the chest and holds the arm in this position by two long adhesive strips around the arm and body, one near the elbow and the other near the shoulder. The principles of reduction here are the same as those used for the elbow and wrist fractures above referred to. They are essentially the same as used by those who employ for this fracture weight traction on the arm held in abduction at the shoulder, the difference being that one method uses continuous traction over a considerable period and the other at one sitting. The essential thing is to use enough traction to overcome the overlapping. Regardless of how much the lower fragment is pushed outward the effort will be fruitless until the overlapping has been completely overcome. The X-ray taken after reduction frequently shows that the pad in the axilla is making too much pressure outward and is angulating the fracture. After four or five days or a week the pad can be removed and the angle pressed inward by an adhesive strip to the body.

The only worth while proof of the value of any method of reduction is the X-ray evidence, the comparison between the skiagraphs taken before

and after the reduction. The lantern slides furnish full proof that these principles properly applied will give satisfactory results. Such results are being obtained more and more widely by those who employ them.

#### SHOULDER JOINT INJURIES

The preceding remarks on the application of the mechanism of the fall on the hand as the great cause of all typical fractures and dislocations in the upper extremity are very brief and crude, but the time and space will not permit more detailed discussion. It should be borne in mind that injuries of the skeleton include also sprains and that sprains are very frequent, troublesome and obscure. No joint region in the body is the site of more obscure and frequent traumatic conditions than that of the shoulder. Sprains are aborted dislocations, i. e., the lesion in both is the same except as to degree. In some joints it is almost impossible to get a dislocation, as at the wrist or ankle. A pure sprain is a mildly torn ligament from a force not severe enough to produce a dislocation or a fracture. It is true that we frequently have sprain-fractures and that Colles and Potts fractures are frequently fracture-dislocations. At the shoulder joint, however, the fracturing force, hyperabduction, according to its degree, will produce always the same lesion varying from the mildest tearing to the most severe with dislocation of the humeral head. Indeed in many cases the force was great enough to produce the most severe laceration of the axillary portion of the capsule with dislocation, the humeral head jumping back into the socket as the arm fell to the side from the abducted position. Accepting this mechanism and pathology we have thus accounted for a very large number of typical traumatic shoulder cases; when we take into account all the shoulder dislocations, those which persist afterwards and those which are spontaneously reduced with the very much larger number of sprains or milder capsule lacerations, just as sprains at the ankle are much more frequent than Potts and similar fractures.

#### STIFF AND PAINFUL SHOULDER AND TRAUMATIC BRACHIAL PARALYSIS

Neuritis, arthritis, subacromial bursitis, are a few of the conditions which confuse us. Traumatic brachial paralyses have been under discussion for many years and still are. Stiff and pain-

ful shoulders are very common, very troublesome and difficult to control. The writer has long been convinced that they are all closely related to each other and are, in most instances, varying phases of the same pathology, that of injury to the shoulder joint such as outlined above. The joint on the axillary side is deep and difficult to palpate so that one must infer rather than demonstrate this lesion. The common picture of them all is a stiff and painful shoulder with a decided weakness of the arm, often an actual paralysis. Fifty years ago or more there began a tendency to turn these cases over to the neurologists but in recent years this has been largely discontinued. Beginning with Duchenne, supported by Erb, they were attributed to injuries of the brachial plexus, Erb localizing the lesion to the junction of the fifth and sixth roots of the brachial plexus. But the Duchenne-Erb explanation of these cases has practically disappeared from the literature so far as it concerns adult cases. Codman attributed most of these cases to subacromial bursitis and says "in some of these cases these secondary changes in the nerves and muscles almost amount to real paralysis and simulate lesions of the brachial plexus or progressive muscular atrophy." The writer has seen all grades of brachial paralysis associated with these stiff and painful shoulders, from a complete paralysis of motion involving the whole upper extremity even with loss of power to make any movement in any finger down to a mild grade weakness in the shoulder region. They all have a partial ankylosis of the shoulder joint and retain sensation throughout the limb and the power gradually returns usually with the return of motion in the shoulder joint. It is the gradual general recognition of these characteristics which has slowly eliminated the brachial plexus injury from the literature as the cause of these common cases.

Duchenne and Erb in attributing these adult cases to injury of the brachial plexus associated with them, as due to the same cause, the obstetrical paralyses. Erb's localization of the plexus rupture to the junction of the fifth and sixth roots was based on a study of adult cases his reference to a single obstetrical case being only casual. As already stated so far as it is associated with the adult cases, the Erb idea has practically disappeared from the literature. It is still used to explain the obstetrical cases but its influence is clear-

ly receding, even in connection with these cases, although it still receives support from prominent writers. There has been too much reliance on what the older authorities thought of Erb's paper and altogether too little on our own judgment of it. His paper is very brief, didactic and positive. In fifty years the profession has so far advanced that the average physician, today, is better able to pass judgment on it than the leaders of the profession in those earlier times. But the paper has been generally inaccessible for many years and probably never has been accessible to the average physician in this country. It is in the German language and copies of it are to be found probably in only a very small number of medical libraries in this country. It has long been the writer's opinion that if a good English translation of it were easily accessible to any member of the profession wishing to read it, its influences in connection with the obstetrical palsy cases would soon be eliminated as completely as it long has been in connection with the adult cases on which it was originally based; that this would be in the interest of these small cripples who can never come into their own until this theory is overcome.

The shoulder joint has had an important place in the literature as the cause of these cases but fewer supporters than the plexus origin. The adult cases never were accounted for by shoulder joint injury. The two groups are undoubtedly of similar nature, the palsy in the obstetrical cases much more severe, but like that of the adult cases disappears completely if there is no permanent disturbance in the shoulder joint. An unreduced dislocation in either group would be associated with a permanent crippling of the limb of severe degree. The causative force in the adult is hyperabduction, in all probability, in the new born the compression of the shoulders by the bony maternal pelvis. Hyperabduction produces an anterior, subcoracoid dislocation. The pelvic compression of the shoulders in the new born when severe enough produces in the shoulder most compressed, always a posterior subluxation with marked internal rotation of the whole limb never an anterior one. The adult dislocation is almost always recognized in time and reduced the joint returning to the normal. The subluxation in the new born is almost never recognized until too late and probably can not be reduced without operation and only imperfectly by



operation so that the limb remains permanently crippled by marked limitation of abduction and external rotation, and atrophy of the limb in proportion to the limitation of movements. The problem becomes one of improving the shoulder movements and very much improvement can be accomplished. The writer can not recall a case in which the parents were not pleased with the results.

#### RECURRENT DISLOCATIONS OF SHOULDERS

As already stated the common or typical dislocation is the subcoracoid or anteroinferior or axillary. Normally the axillary portion of the capsule becomes taut on abduction of the arm and while intact prevents the escape of the humeral head from the socket into the axilla. Hyperabduction or excessive abduction tears this taut portion of the capsule and by a leverage of the humerus against the acromion the head is pried out over the anterior glenoid margin into the subcoracoid position. Only a more or less transverse capsule rent will permit the head to leave the socket by a gaping of the rent and an increase in the distance between the glenoid and humeral attachments of the capsule. If hyperabduction again occurs before close cicatricial healing of the rent takes place the head again stretches the torn capsule margins apart the gap finally becoming bridged across by new cicatricial capsule with a consequent lengthening of the capsule here, sufficient to permit recurrence of the dislocation without tearing of the capsule. Hence there is no pain or disturbance of function in the joint following reduction of a recurrent dislocation and there can be no cure because no cicatricial tissue to contract the capsule to the normal. Operation alone can furnish the conditions necessary for a cure. Capsulorrhaphy by reefing, dividing and overlapping the margins or excising a piece and permitting the margins to cicatrize together, has proved itself the operation of choice. Operation has been done rarely because the cases are not numerous and because the capsule here lies back of the axillary vessels and nerves.

The most popular route has been the deltopectoral but its difficulty is indicated by the numerous modifications to which it has been subjected and the modifications are still being added. The writer, nineteen years ago, in January, 1908, exposed the capsule through the axilla and has operated on 62 shoulders, 3 for posterior dislocation and 59 for anterior, in everyone of the latter by the axillary route. Aside from the care necessary for safeguarding the circumflex nerve, the axillary

route is the easiest, requires the smallest wound, divides no muscles, causes little or no hemorrhage, practically eliminates fear of infection, requires a week or less in the hospital, and almost guarantees a cure. In a few cases the operation may fail to prevent a dislocation or two afterward but the capsule tears which must now result, properly used, adds the necessary cicatricial tissue exactly where it is needed to complete the cure and does it more effectively than another operation on the capsule could. The writer frankly tells the patient before operation that such a dislocation does occur in a small proportion of cases after operation but that a second operation will not be necessary to complete the cure, that if a dislocation can occur after operation it is welcomed because it proves merely that it is necessary to build the strength of the joint up to the normal in that particular case. This result could not be obtained without the operation and it gives one the right to promise almost one hundred per cent cures in non-epileptic cases. The prognosis is not quite as good in epileptics but in most of them the capsule operation will not be followed by recurrences and in those that do a high excision of the humeral head, a reshaping of the glenoid cavity as done by Hildebrand or probably the bone graft operation of Speed, will prevent further dislocations.

In passing judgment on the effort made here to support the mechanism of the fall on the hand for all the common or typical fractures and dislocations of the upper extremity, one might well give thought first to the fact that probably no one has ever proved this mechanism for the Colles fracture and that probably no one denies it. The best that is hoped for now is tolerance of the suggestion and perhaps some interest in it in the future. For the writer it explains best the great fact of typical deformity, why typical deformity shows such an indefinite number of variations from no deformity at all up to extreme overlapping of the fragments, this being due merely to the degree of force applied. The best chance of correction comes from knowing the fracturing force and reversing it. Most compound fractures are thus explained by this indirect violence so that the wounds are essentially clean because made by the extrusion of the fragment ends. The results of treatment based upon this mechanism must be depended on chiefly to prove it, and that means that the proof must be sought in a large, varied and confusing field of fractures and dislocations. The writer has been developing the idea for about twenty years and his experience bears out the saying that "the truth pieces itself together."



# THE RHODE ISLAND MEDICAL JOURNAL

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**R. I. Ophthalmological and Otological Society**—2d Thursday—October, December, February, April and Annual at call of President  
Dr. J. J. Gilbert President; Dr. M. J. O'Connor Secretary-Treasurer.

**The R. I. Medico-Legal Society**—Last Thursday—January, April, June and October. Dr. Creighton W. Skelton President; Dr. Jacob S. Kelley, Secretary-Treasurer.

## EDITORIALS

### UP TO DATE

At no period in history has there ever been evinced the same eagerness to learn that is shown at the present time. Education begins at an early age, and while in many parts of the country it is compulsory up to a certain age, the importance of mental training stirs parents and pupils alike to seek as much education as possible. Not only are high schools crowded in spite of new building, but

colleges are overwhelmed with applicants. College graduates will soon be as numerous as high school graduates a few years ago. The explanation of all this is comparatively simple. Modern civilization is more complex than formerly and advanced education is required in many vocations to say nothing of the professions. More and more even the farms are being populated by college graduates. Electricity, the automobile, the telephone, building engineering, mechanical arts of many kinds require trained minds to master them. Moreover, more education demands more

education. People are obliged to meet others on the same level if they expect to succeed. But education is not all utilitarian. It brings happiness. The educated man even though he may not be so successful financially, is yet able by reading and observation to appreciate what is going on in the world. There is no more pitiable picture than an illiterate person, particularly in his declining years, who sits all day long without the solace of reading.

Education does not, or should not, cease on leaving school. There are constant changes going on and if a man expects to keep up with the procession he must constantly be seeking information by reading, through conventions, by lectures or post-graduate instruction. The writer had a grandfather, a farmer, who at the age of 72 attended lectures in agricultural chemistry at the State University.

All this is applicable to physicians even more than in many other callings, for they not only must make a living but they are burdened with responsibility of conserving human life. There are many doctors who are following the instructions about the treatment of disease taught them in their medical school days. While in many instances such instruction cannot be improved upon, real advances in diagnosis and treatment of disease are constantly being made. Every progressive physician is changing his treatment of the sick when he is satisfied of the value of improved methods. Unless a physician is constantly seeking new facts and refreshing his mind about facts he once knew, he will descend to the plane of those who treat symptoms only.

Opportunities for study are available for all physicians. There are post-graduate schools of medicine, hospital clinics, medical literature, conventions, opportunity of preparing papers, by which a physician can keep up with what is going on in the medical world. Moreover, his own practice affords opportunity for education if he will only observe accurately, and record and digest the facts gleaned by his observations. It is sometimes disheartening to learn how many physicians there are who seem satisfied with themselves, and do not avail themselves of their opportunities.

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At the recent meeting of the Association for the Study of the Internal Secretions a very encourag-

ing trend of thought was noted throughout. All papers appeared to be based on sound experimental or observed data. The members of the society are apparently approaching the subject through biology and physiology. When these two avenues have been well explored, the pathology of the internal secretions and the clinical applications of measures to correct pathological disturbances will be far more accurate and specific than it is today. The stigma attached to the subject now because of the generally unscientific therapy will also disappear. The Association is one that not only deserves support of physicians but it is in a position to greatly repay in sound knowledge the physician interested in an important subject.

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## SOCIETIES

### PROVIDENCE MEDICAL ASSOCIATION

*(Providence District Society)*

The regular monthly meeting of the Providence Medical Association was held at the Medical Library, 106 Francis Street, Monday Evening, June 6, 1927, at 8:45 o'clock.

With the following program:

1. Surgery versus Radium Carcinoma of the Rectum.

Jerome M. Lynch, M.D. Prof. of Intestinal and Rectal Surgery, New York Polyclinic Medical School and Hospital.

2. Moving Pictures: Manufacture of diphtheria anti-toxin.

J. H. Schriever, Sc. D.

The Standing Committee approved the applications for membership of the following:

Howard F. Keefe      Frank W. Dimmitt

DR. PETER PINEO CHASE, *Sec.*

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### WASHINGTON COUNTY MEDICAL SOCIETY

The quarterly meeting of the Washington County Medical Society was held at the "Oaks Inn" Westerly, Wednesday morning, July 13, 1927.

The President, Dr. John Champlin, Jr., called the meeting to order at 11:20 and routine business was transacted.

Attention was called to the death of Dr. James Noyes Lewis, which occurred May 28, 1927, and the following Resolutions presented by Dr. Champlin were unanimously adopted.

#### RESOLUTION

*Whereas*, It has pleased our Heavenly Father in His infinite wisdom to remove from our midst our beloved colleague James Noyes Lewis, M.D., and

*Whereas*, The Washington County Medical Society has thereby sustained the loss of one of its oldest members whom it feels has been an honor to its membership. It feels that Doctor Lewis was held in the highest esteem by his colleagues and by the community universally; that he was a Christian character and devoted his life to the up-lifting of his fellow-man, not only in their sickness, but in all the walks of life where duty called him. He was a faithful and conscientious physician and when sickness overtook him, he bore the ministrations of failing health with an admirable fortitude; therefore, be it resolved, that these resolutions be spread on the Records of this Society, and that a copy be sent to the bereaved family and also to the RHODE ISLAND MEDICAL JOURNAL.

Dr. Henry F. McCusker now addressed the Society on the subject, "Backache—Its Causes and Treatment." At the conclusion of the discussion a rising vote of thanks was accorded Dr. McCusker.

Adjourned and dined.

W. A. HILLARD, M.D.,

*Secretary.*

### HOSPITALS

#### THE MEMORIAL HOSPITAL

The following is a copy of the minutes of the Memorial Hospital Staff Meeting held Thursday evening, May 5th:

"Meeting called to order by President Wheaton at 9:15 P. M. Record of attendance taken. Thirteen members were present.

"Minutes of the previous meeting read and approved. Report of Surgical Service, Medical Service and Orthopedic Service.

"Dr. F. V. Hussey gave a report on resolution regarding Mr. Lyman B. Goff. Resolution ac-

cepted and copy has already been mailed to his daughter, Mrs. Kenneth Wood. Copy placed on file.

"A very interesting paper on 'Cystic Appendix' was read by Dr. Wm. P. Davis. Paper discussed by Drs. H. B. Moor, F. V. Hussey and A. T. Jones.

"Adjourned at 10:00 P. M."

JOHN F. KENNY, M.D.

*Secretary, Memorial Hospital Staff*

### ANNOUNCEMENTS

The American Board of Otolaryngology conducted an examination at Washington, D. C. on May 16 and 17, and at Spokane, Washington on June 4. Of the 142 men examined at Washington, D. C., 119 were passed and 23 failed to pass the examination. In Spokane, the number passed was 46, and the number failed was 6.

The next examination will be held in Detroit on September 12, 1927. The applications for examination should be sent to Dr. H. W. Loch, Secretary, 1402 South Grand Boulevard, St. Louis, Missouri.

For more than twenty years the American Medical Association has been publishing a directory of the medical profession. Ten editions have appeared, the last one (1927) being just off the press.

The first edition (1906) contained 128,171 names of physicians in the United States, its dependencies and Canada. The new Tenth Edition includes 164,002 names. There is an increase of 2,644 over the previous edition. If the Directory were merely a list of names and addresses of physicians it would not have great significance. That information is valuable, but of far greater value is the fact that the Directory gives proof of the right of each physician listed to practice medicine—namely, time and place of graduation and year of license. In addition, society membership, specialty and office hours are included. Capital letters indicate those who are members of their county medical society, and a special symbol follows the names of those who are Fellows of the American Medical Association.



The information concerning hospitals and sanitariums of the United States is another valuable and extensive feature. Descriptive data appears following the names of 7,816 hospitals and sanitariums such as type of patients handled, capacity, and name of superintendent or director.

The list of physicians in each state is preceded by a digest of the laws governing medical practice in that state; members of licensing board; state board of health; names of city, county and district health officers; officers of constituent state associations and component county and district medical societies. The book, in short, is one vast source of reliable data concerning the personnel of the medical profession and the institutions and activities closely related to it. It contains 2,575 pages.

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### JOSEPH LISTER

One hundred years ago, on April fifth, Joseph Lister was born at Upton, Essex. His father, Joseph Jackson Lister, was a London wine merchant whose hobby was the study of optics and who made such marked improvements in achromatic lenses that he has been termed the father of modern microscopy. The younger Lister graduated in medicine from the University of London in 1852, and then studied surgery under Syme, the broad-minded, progressive professor of surgery at the University of Edinburgh. Syme was especially famous for his introduction of excisions of joints in place of amputations, was the first European surgeon to use ether anesthesia, and has been described as one who "never wasted a word, nor a drop of ink, nor a drop of blood," a description which the surgeon of our day may well strive to merit. It was but natural, therefore, that Lister's first important publication should be a classical paper on excision of the wrist in caries. He was constantly and profoundly impressed by the tremendous mortality brought about by suppuration, and saw in Pasteur's work on fermentation and putrefaction a possible means of preventing this great loss of life. After unsuccessful attempts at chemical sterilization with zinc chloride and the sulphites, he treated a compound fracture, on August 12, 1865, with carbolic acid solutions and obtained healing without suppuration. The magnitude of this accomplishment can be better appreciated when it is recalled that the consensus of

the best surgical opinion had been recently expressed by Syme in the statement that "it would be better if in every case of compound fracture of the leg amputation were done without any attempt to save the limb." Two years later Lister published the results of his work in a paper entitled "On the Antiseptic Principle in the Practice of Surgery" and thereby introduced a method destined to revolutionize surgery. Through a storm of criticism and opposition this Quaker surgeon calmly proceeded to add one convincing demonstration to another until, in the course of the next twenty years, Listerism, and its logical development asepsis, were accepted on the basis of modern surgery. It is pleasing to note that recognition of Lister's great contribution came during his lifetime, and that honors were accorded him in all parts of the world. On the occasion of this, the centenary of his birth, we can well join in the sentiment so happily expressed by Mr. Bayard, the American Ambassador to England, in 1902, "My Lord, it is not a Profession, it is not a Nation, it is Humanity itself which, with uncovered head, salutes you."

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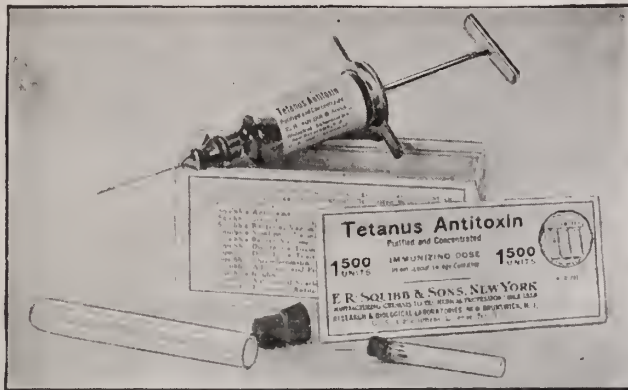
### BOOK REVIEW

#### LIFE INSURANCE MEDICINE

*Published by the NEW ENGLAND MUTUAL  
LIFE INSURANCE COMPANY*

This little volume consists of several related papers dealing with the early recognition of certain disease conditions and life extension. The chapter on glycosuria is exhaustive in scope and has an unusually complete bibliography appended. The chapters dealing with the creatinin content of the urine, hypertension, practical method of estimating vital capacity and the effects of respiratory strain upon diastolic pressure were found interesting. The three remaining papers deal with the early recognition of disease and the allied subject of life extension. While the volume will be of particular interest to those doing life insurance and health extension work, yet the physician not especially interested in that work will find much of value and interest in the perusal of this little book.

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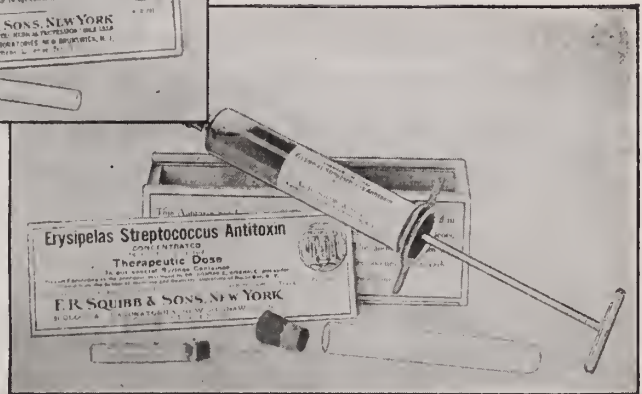
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## ORIGINAL ARTICLES

### PROFESSIONAL HEALERS\*

By JAMES J. WALSH, M.D., PH.D.  
OF NEW YORK

By professional healers I mean both healers by profession and healers in the profession. There is an old fashioned expression that probably comes to us from the time of Hippocrates though the English formula for it is usually attributed to old Dr. Parry of Bath which Osler used to like to quote — "It is much more important to know what sort of patient has a disease than what sort of disease a patient has." The latest history of medicine written by Dr. Greene Custom has an article in the beginning of it by Dr. Crookshank of London on "Philosophy and Medicine" in which he suggests that there is a definite tendency in our time to get back to the old Hippocratic idea of treating the patient and not his disease and of getting away from the diagnosis of distinct disease especially as it was developed so highly at the end of the nineteenth and the beginning of the twentieth century. That was the Galenic method. He says that we are now going back to be followers of Hippocrates.

The healers by profession are the ones who cure any and all the diseases of mankind by some very simple method. For them disease is an error of mortal mind or it is a subluxation of the vertebrae or it is a failure of adjustment and all you need do is get disease out of your mind, have the subluxation corrected, have the adjustment made and then you proceed to get better. These healers proclaim that Pasteur was a fool, Lister little better than a knave, the bacteriologists self-deceived, the surgeons practisers on the gullibility of mankind and the physicians just galoots who know no better and are making a living out of the foolishnesses of men and women whom they are deceiving into the belief that they are ill and are being cured according to nature.

It seems impossible that men should accept such wholesale absurdities but so far from popular education lessening the tendency to follow after quacks and charlatans, it has increased it. A great many people can read and write but so far from helping them to think this in a great many cases actually seems to distract them from thinking. They are so much occupied with reading that they have no time to think. Between three and four editions of the newspapers every day and the four thousand magazines that we now read in this country, soon almost no one will have any time to think but they will just be ready to take suggestions. So long as they do we shall have an abundance of healers by profession. Men who claim to be in touch with the Almighty in some way or other will heal the ills of mankind and all sorts of healing movements will flourish. Not long since I attended a seance of a new religion—the religion of the Solar Plexus. That was an entirely new one on me so I wanted to hear about it. We were told by a very glib talking, suave mannered man who used good English, rather long words, that the only God was within us. He quoted Latin for that, *est Deus in nobis*. He said that we should not worship a God without us and especially not pay priests or ministers to put us in touch with God. We had a power within us, our solar plexus, that enabled us to accomplish all that we would provided only we concentrated on it. This would give us not only health but wealth and prosperity because it would enable us to exercise all our powers, patent and latent, overt and covert and thus accomplish all our purposes. There were probably three score people present at that afternoon lecture on the new religion and I noticed a number of bills in the collection basket and the gentleman maintained a suite at a fashionable hotel. He manifestly cures a lot of people of a number of ills for which they have applied to the doctors in vain.

There are those who have given very much thought to the subject who have been inclined to say that these healers by profession are very largely fostered by the healers within the medical profession who cure the ills of their patients in so far

\*Read before the Annual Meeting of the Rhode Island Medical Society, June 2, 1927.



as they cure them in very much the same way as the healers by profession. You will find them using the last new remedy whatever it may be that as been advertised extensively or has been talked up by the detail man of the manufacturing pharmacist. Whatever is the fad of the moment they are following it. They are having most of their patients' teeth pulled on the slightest provocation. They are having tonsils removed on even the slightest of indications. They are sure that there must be a focus of infection somewhere hurting their patients' health though they often fail to realize that even a little regulation of the patients' daily life would make them ever so much better and would often put an end to all their symptoms.

Thin patients who are manifestly not eating enough and who are complaining of pains and aches in their muscles because their muscles do not receive enough nutrition to enable them to work properly are said to be suffering from rheumatism or from the absorption of toxic material that is seriously disturbing joint and muscle function. Patients who are taking laxatives to move their bowels when they ought to be eating coarse food that would give them healthy and properly formed movements are supposed to have all sorts of latent conditions when what they are really suffering from is lack of proper nutrition. An immense amount of so-called indigestion comes not from eating too much but from eating too little and often unsuitably. People who are sitting in the house all day and who get almost no exercise and very little outing have symptoms of various kinds supposed to be due to focal infection when what they need is air and exercise.

There has always been a tendency for even thoughtful members of the profession at times to take up with remedies that promise to cure disease instead of to benefit the patient. After all the use of mummy for three hundred years was largely a professional matter. They argued that if the embalming fluid could keep dead flesh from disintegrating, what would it not accomplish for living tissue. They rather expected that it would make them immortal. Not being able to procure the Egyptian embalming fluid they did the next best thing and used mummy pills. When genuine mummy gave out they used carbonized beef mixed with asphaltum and got just as good results. The druggist usually has "something just as good."

About the time that mummy played out they began to use skull moss. They scraped the moss from the skulls of criminals hanged in chains, thinking that it represented the quintessential elements of the brain of these very enterprising criminals and therefore must be good to supply pep and energy to those who were played out or were suffering from nervous exhaustion. Of course they got wonderful results. Fabricius of Hilda explained that it was a question of magnetism that enabled the *unguentum armarium* to work wonders in curing injuries. This famous ointment was applied not to the wound but to the weapon making the wound while the blood was on it and the change in the magnetic condition of the shed blood by the ointment was communicated wirelessly, I suppose, to the unshed blood of the patient and this brought about a great change in the tendency to recovery and led to the rapid healing of wounds which resisted other treatment. Francis Bacon was sure that this was a wonderful remedy because he had seen it work on animals as well as men, on children as well as adults, and therefore he felt that it could not be a question of mental influence.

All down the centuries men have been tempted to healing instead of medical treatment. Elisha Perkins reading the accounts of Galvani's experiments with frogs thought that he could make something that would be helpful to mankind so he devised his tractors and proceeded to cure a lot of people with them. He cured lumbago and sciatica and pains and aches of various kinds and lame shoulders and lame backs and painful joints that were worse in rainy weather and all the sort of things that we now are likely to attribute to abscesses of the teeth or infected tonsils or something of that kind. He thought he could prevent disease as well as cure it so he tried the prevention of smallpox but he must have forgotten about himself for he died of smallpox. His son took the tractors over to England before his father's death and cured over a million of people of all sorts of ills and ails and then the tractors died out. Oliver Wendell Holmes wondered how they could have died out seeing the intense attention they attracted. Thacher, our first medical biographer, is simply astounded that Perkins' tractors should have attracted so much attention before his death and then have sunk into the most absolute if not entirely innocuous desuetude. We have them still

in our medical museums and of course there is nothing in them and the proverbial dead mackerel is very much alive compared with them, there is no electricity, no magnetism of any kind in them, and yet they cured thousands in this country and over a million of people in England.

I was in Paris when the excitement over Brown Sequard's elixir had not yet quite disappeared. Brown Sequard wanted to get something to rejuvenate old men so he took the testicles of the rabbit and made an emulsion of them and injected them into the sexagenareans. The jack rabbit is "Johnny on the spot" so far as sex efforts are concerned and has a large number and frequent progeny so that no wonder old men felt better after having some of this injected into them. It gave them new courage at least and that was what they needed. Don't let us forget that thousands of them crowded up to Paris and a great many of them thought they were wonderfully benefited by this elixir. We with our monkey glands and our ligation of the vas have nothing on them in that matter. It is the same old game and it plays just the same way and people fall for it of course but the surprise is when the doctors fall for it.

I was in Berlin when Koch introduced not his first tuberculin but his second tuberculin. The first one had been announced as a cure for consumption, mainly it is said because the Kaiser wanted to have that German Medical Congress attract attention by some sensational announcement. Against his better judgment Koch made the precocious announcement of his results. Instead of benefit, an immense amount of harm was done by it and of course consumptives all over the world were disturbed and were taken out of their ordinary routine and those who could not go to Berlin were very much disappointed and lost appetite and sleep over it. Koch was sure that the second tuberculin was going to accomplish what the first had failed to do in spite of his announcement. We have tried that second tuberculin for thirty years since then and we are not quite sure whether it does any good or not though with the balance against it.

In New York we have the story of Alonzo Clark, a really great physician, who was sure that he could cure most of the continued fevers, and above all typhus and typhoid fevers, by continuous treatment with French brandy. He gave a teaspoonful every half hour day and night even

though the patient had to be waked up for that purpose. He was quite confident that if this plan were pursued vigorously every patient would get better. There was not a doubt left in his mind with regard to that. I need not say that there is nothing in his idea and that he did harm rather than good by the treatment but it is an interesting historical fact.

Toward the end of the nineteenth century I saw opotherapy as it was called come and then go, under the aegis of another genius in his way, Dr. William A. Hammond. Either he suggested or he took up the idea that giving patients portions of the organs that were affected in their bodies in any way might if not cure those organs at least help them in their function and therefore prove of value for deteriorated conditions. As a result of this people who had brain symptoms were given cerebrin and people who had Brights disease were given nephrin, while those who had any heart symptoms were given cardin and so on. Of course some wonderful results were secured, that is to say a number of patients to whom this novelty in therapeutics was explained and who were at the same time given the assurance that in excellent hands it had proved of very great therapeutic value felt sure that they ought to get better and then proceeded to get better. Almost needless to say they had no symptoms except those that the mind were producing on the body but then sometimes those symptoms are often insidious and deceptive and may lead inevitably to the conclusion that there is some organic condition present.

It did not take long however to dispose of opotherapy and indeed it takes a much shorter time now for the profession to be disillusioned with regard to these novelties in therapeutics than was the case a few years ago. This is very probably due to the fact that ever so many more people are alive in the older years when we hear more complaints than there used to be. One out of every five of the children born in New York City three quarters of a century ago used to die before the age of one year and another one used to die before the age of five years. That left us with only three-fifths of our population to care for. Natural selection is kindly and usually took away by preference those who were likely to be delicate and ailing or to be a little unstable in mentality or in nervous control that is those who are particularly likely to become regular patients for physi-



cians later on in life. The greater number of patients enables us to judge sooner of the negative quality of a remedy. The suggestible people are eliminated sooner and then we come down to the hard-boiled ones and they do not get cured by any mental influence and so we learn that the remedy was mental rather than physical in character. With our experience in opotherapy the endocrines find it a little bit difficult to secure a foothold in our minds. Of course the very crude theory that an organ eaten would stimulate an organ now looks very foolish. It seems to have no more meaning than the old stories that we have of Indians eating the hearts of brave and stalwart enemies whom at last they had conquered because they felt that through his heart there was passing to them something of the courage and vigor of their adversary.

It is not a far cry however from that to eating sweetbreads and consuming gland products of various kinds in various quantities and then expecting to get wonderful results for all sorts of things. A gunshot prescription of endocrines bringing together nearly all the gland products in the body is just as foolish as the calendar prescriptions as they used to call them because they contained so many ingredients that the prescription written for them looked like a list of the days of the month as they used to have them in the old almanacs. We laugh at the physicians who used the calendar prescriptions of the old time but there are still some of us who are using the gunshot endocrine prescriptions the substances of which are aimed at so many different points in the system that it is supposed they must do good for some part of the body. There are a great many physicians who are getting wonderful results with endocrines but then they would get just as good results in most cases if they would talk kindly with their patients, encourage them with the thought that they were going to get better, have them increase their diet, and perhaps, their rest, if they are thin, and have them increase their exercise and modify their diet if they are stout. Anything at all would do most of these patients good if they only took it up seriously and began to feel that they were due to get better rather than to get worse and thus made a few favorable suggestions to themselves.

In recent years we have been curing patients by taking things out of them rather than by putting

things into them. When I began to study medicine we were just in the midst of that unfortunate movement which led to the removal of so many ovaries in comparatively young women. If a woman had any nervous symptoms of any kind or any tendency toward mental symptoms or if she complained of pains and aches that were worse in rainy weather, or if she was sleepless, it was concluded that her ovaries were at fault and they were taken out. After a while fortunately that fad disappeared but not before many thousands of women were unsexed. It seems very foolish to us now and yet I feel that we are doing very much the same thing in removing teeth for all sorts of symptoms without being able to demonstrate that there is any connection between the teeth and the symptoms in question but often without being able to demonstrate that there is anything the matter with the teeth at all. Professor Lewellys Barker of Johns Hopkins talking to the Maryland State Dental Association upon "The Relation of Oral Sepsis to Disturbances of General Health" did not hesitate to say, "I look for example upon the claims of the Trenton School of psychiatrists, who have maintained that the majority of insanities are due mainly to cerebral toxemias that develop because of local infections and that nearly all insane patients can be cured by removal of infected teeth, by operations upon the paranasal sinuses, gall bladders, appendices or intestines, not only as absurd in theory but also as tragic in practical results. Again, that the wholesale removal of the teeth of patients who suffer from various bodily disorders, irrespective of whether these teeth are diseased or not, is equally absurd and tragic, goes without saying to an audience like this."

Dr. Barker quotes with sympathetic approval the comment of that distinguished neurologist of Philadelphia, the last of that great group who in the time of S. Weir Mitchell conferred upon Philadelphia so much prestige in the study of nervous disorders, Professor Charles K. Mills. As a teacher of my own as also of Dr. Thomas here with us today who doubtless remembers even better than I do the dear little professor who had so much more brain than brawn, I feel that I can quote Dr. Mills with the assurance that what he has to say will be received with the consideration that it deserves. On occasion Dr. Mills can be rather incisive and can say things that cut to the



quick. They were meant to. He said with regard to the wholesale removal of almost anything and everything from the human body that has been going on lately: "If the craze for violent removal goes on, it will come to pass and probably before very long that we shall have a gutless, glandless, toothless race, and we may have, thanks to false psychology and surgery, also a witless race."

Dr. Barker has himself rather strong feelings with regard to this cure by removal which is so prominent in the therapeutics of our day. He adjured the dentists not to allow themselves to be run away with by medical and surgical fads but to keep to the middle of the road of reason and common sense and avoid the extremes. It's a long while ago since that old Latin writer of maxims, Publius Syrus, said *in medio tutissimus ibis*, you will always go safest if you are in the middle of the road. Listen then to what Dr. Barker has to say on this and the other subject of removal and more removal and still more removal of important structures which it might be quite impossible to connect in any definite way with the symptoms which are said to be going to be cured by the elimination of the organs in question from the body.

"To keep to the middle path of sanity between faddish diagnosis and extravagantly meddlesome therapy, on the one hand, and culpable failure of recognition of important disease processes and blameworthy ultrapessimism regarding therapeutic measures of definitely demonstrated value, on the other, is not easy for every member of either the medical or the dental profession. Today the teeth and the colon would seem to be exceptionally in danger; yesterday, it was the appendix, the gall bladder and the tonsils that were in jeopardy; only a few years ago the ovaries of women were removed literally by the bushel in certain great operative centers!"

In recent years besides taking things out of the body, removal cures, a great many doctors get a great deal of kick for themselves and apparently also for their patients out of putting things directly into patients' bodies. We used to put our medicines in the stomach and let the mucous membrane do some selective work in receiving or rejecting what instinct told it would be beneficial or deleterious. But now we have gone a step beyond that. We inject materials directly into the vein or at least directly beneath the skin and nature has just got to take it whether she wants to or not.

Fortunately most of the medicaments thus used are perfectly harmless and are very carefully prepared so that they will not produce any reaction of any kind, so that they are perfectly safe remedies. Their safety is also an index of their vacuity of effect. They would remind one very much of the emulsions of cod liver oil that used to be advertised long ago when cod liver oil was very expensive as tasteless emulsion. A guarantee went with them that you could not taste the cod liver oil in them. Someone made an analysis of them and found there was no cod liver oil in them, so that the guarantee could be absolute indeed.

When I hear so much of light therapy in our day and of some of the wonders worked by the violet rays or ultra-violet radiation, I cannot help but think of one of the early experiences that we all went through a little more than fifty years ago. By mistake a firm in New Jersey I believe made much more blue glass than a particular order called for and they did not know what to do with the rest of it because there was not very much call for blue glass. Someone suggested that the blue end of the spectrum was actinic and acted on a photographic plate, so why should it not also act on tissues and bring about curative effects. The head of the Grand Army of the Republic at that moment was a man who was suffering from aches and pains due to old wounds and to malaria and perhaps some rheumatism gathered down on the banks of the Chickahominy, so a young man was sent to suggest to him that sitting under blue glass might be good for him. Of course the whole theory of the actinic end of the spectrum and its possible effectiveness was explained to him thoroughly.

The general was very much interested and promised to sit under the blue glass and report the results. They were very favorable. The general had fewer aches and pains than since the war. There was a meeting of the Grand Army of the Republic not long afterwards and he reported the results. Most of the old soldiers had troubles similar to his, so blue glass got a boom. I remember an uncle of mine who sat under it for some of his pains and aches though he had only served in the army through a substitute whose bones are bleaching on some southern battlefield, and later on I found the framed blue glass panes in the garret of the old homestead. Many tons of blue glass had to be made and everybody was pro-

claiming what a wonderful agent it was for the cure of pains and aches and disabilities of all kinds but of course it represented the actinic end of the spectrum, so why shouldn't it work wonders, and it did.

Not long since lecturing for the forums in Florida with regard to the funny things that cure people I did not mention blue glass but in the questions afterwards a man asked me if I did not think that light was a wonderful therapeutic agent. Well, I said, I was not sure about that and that it was very interesting to consult controlled cases in the matter. Rollier, for instance, claims to be making some really wonderful cures in the tuberculosis of children by exposing them to sunlight until they become not only brown as berries but really as dark as black walnuts sometimes. The exposure must be made gradually but the results are very striking. When I asked my brother however who is a specialist in tuberculosis what he thought about light exposure for the disease he said that there were three other sanatoria for tuberculosis in the same district as Rollier's. One of them uses light for some cases but not for most of their cases; the other two treat tuberculosis in the conventional way by having the patients sit out in the air but well protected from the sun. The therapeutic results in all four sanatoria are almost exactly the same. Certainly there is no preponderance of good results in Rollier's institution as compared with the others.

That is what is so important in the estimation of the value of cures. There are a whole lot of diseases that will be benefited by almost anything provided you give them time and reasonably good living circumstances. Expectant treatment often has wonderful results. If you think you have a remedy for a disease, well then every alternate case should be left without the particular remedy and treated to the best of your ability in some other way. You will often be surprised to find that your controled cases do just as well as those treated by the new cure. But then if you are persuaded that you have a new cure, it will seem to you like a very serious neglect of your patient's health not to treat everyone of them with it. There is the trouble with professional healing both inside and outside the medical profession.

It is easy to understand then that we shall continue to have healers by profession as long as we have professional healers, that is healers in the

profession. They make a diagnosis of an ill or an ail and then they proceed to cure that. They forget that our business is treating patients much more than their diseases. It is much more important to know what sort of patient has a disease than what sort of disease a patient has. That may seem too old-fashioned but we all of us readily realize that if a man comes down with pneumonia it is much more important to know what he took into his pneumonia with him than of the pneumonia itself. If he had scarlet fever when he was seven or eight and developed glomerular nephritis afterwards constituting a basis for Brights disease, he will probably die on the fifth or sixth day from toxemia because his kidneys will not eliminate the toxins from the pneumonia successfully. If when he was some place between fifteen and twenty-five he had old-fashioned growing pains with red and swollen joints or true rheumatism with the same symptoms, and his heart was affected, he will probably die on the seventh or eighth day from heart exhaustion because his crippled heart cannot pump blood through his solidified lung, nor keep the strain of circulation through the well lung. If he had tuberculosis at twenty, he will probably not have a frank crisis but his pneumonia will resolve by lysis and he will have a time keeping alive after the tuberculosis that will be lighted up by the pneumonia. What is thus true for pneumonia as the captain of the men of death, is true for all affections. It is the patient who counts. If patients want to have diseases cured, let them go to the quacks who will cure them. If they want to have themselves strengthened in various ways so that they can overcome their diseases, then the regular members of the profession who have lengthened human life until now it is more than twenty years longer than it was sixty years ago will help them.

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#### THE DIAGNOSIS AND TREATMENT OF SCABIES\*

By ROY BLOSSER, M. D.  
PROVIDENCE, RHODE ISLAND

Scabies is one of the commoner skin diseases and one which, with few exceptions, can be cured in a few days' time. In many cases, however, the

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\*Part of a paper read before the Pawtucket Medical Association, April 21, 1927.



treatment is a failure. These failures most often are due to the fact that patients are not instructed as to the proper method of carrying out the treatment; only in comparatively rare instances are they due to the inability of the physician to make a correct diagnosis or to prescribe a suitable remedy.

The following history illustrates most of the "don'ts" in connection with the treatment of scabies:

Mrs. G. came to the O. P. D. of the R. I. Hospital with her son aged three and stated that three months previously the little boy had spent the night with relatives and a few days later was found to have a slight eruption on the body which itched furiously especially at night. The mother found upon investigation that the family of relatives where her little boy had spent the night were suffering from this same kind of skin trouble. About a week later her son aged six, who slept in the same bed with the younger boy, developed the same sort of skin trouble.

The mother called in her family physician who said it was nothing to worry about. He did not prescribe any treatment. A few days later she called another physician who prescribed an ointment containing sulphur and advised her to apply it every night to the affected parts and to give the boy a bath every day. Inasmuch as there was only a small jar of the salve the mother used it at first only on the three year old who was more severely afflicted than the older boy. This treatment relieved the itching somewhat and the mother stopped treating aged three and treated aged six, having the jar of salve refilled at the drug-store from time to time. A few weeks later the mother contracted the disease and shortly after this the father followed suit. The mother obtained a larger quantity of the salve and did the best she could to treat herself and the three other victims. Meanwhile the younger boy's skin was becoming irritated and inflamed and there were a number of pustules, covered with crusts, on his hands and other parts of the body.

This state of affairs continued for more than two months. All the family became nervous and irritable from loss of sleep. The two boys had poor appetites and were losing weight. The father found it difficult to carry on with his work.

Upon examination at the R. I. Hospital the younger boy's skin was found to be badly irri-

tated by the prolonged use of sulphur ointment, and it was deemed advisable not to attempt antiscabetic treatment until this had been allayed by the use of Lassar's paste to which was added 1% of phenol.

For the other three, the mother was given two and one-half pounds of salve containing one drachm of sulphur to the ounce of benzoinated lard, and printed instructions for carrying out the treatment. She was directed to treat the three older ones simultaneously and to have the younger boy sleep alone so as not to reinfect the older boy after the latter was cured. A week later the parents and older boy were free from itching except for a slight amount at times. Examination showed no new lesions of the disease; the skin was not entirely smooth but this was considered no more than usual following scabies which had lasted over two months with the attendant irritation and abrasions of the skin. The mother was cautioned not to use any more of the sulphur ointment for any itching that remained; excessive bathing was to be avoided and the affected parts of the body were to be annointed daily with cold cream or olive oil.

Aged three's skin was much improved. The pustules had been opened daily by having the crusts lifted off, following which wet compresses of boric acid solution were applied. Some new lesions of scabies were present and a prescription containing one drachm of balsam peru to the ounce of vaseline was given.

#### DISCUSSION

From a study of the foregoing case history we find that the following errors were committed:

(1) Failure to make an early and correct diagnosis. The history of the one child having developed a severe itch after spending a night with a family who were similarly afflicted was strongly suggestive of scabies.

(2) Prescribing too small an amount of ointment for adequate treatment. This is a common mistake in treating scabies. From six to ten ounces for a child, and twelve to sixteen ounces for an adult are required. The salve must be applied to the entire body with the exception of the head, face and neck.

(3) Too long continued use of sulphur ointment. Application of this remedy for three successive nights rarely fails to cure scabies. If it is continued longer it is apt to irritate the skin and



produce a dermatitis which adds greatly to the discomfort of the patient and which must be relieved before attempting anti-scabetic treatment.

(4) Failure to treat all the cases in a family at the same time. One patient cured may later become reinfected from one who has not been treated.

(5) Daily baths during treatment. The continued parasitidal effect of the ointment is desired; it should be allowed to remain on the skin until treatment is finished.

#### ETIOLOGY

Scabies is caused by a small insect, the *Acarus Scabiei*, which is barely visible to the naked eye, being about the size of the perforation produced by a fine sewing needle.

Scabies is most often contracted by sleeping in an infected bed. Hotel beds and Pullman berths are considered responsible for some cases. It is probably contracted at times by shaking hands or by the use of an infected towel.

#### DIAGNOSIS

If a definite history of exposure to scabies can be obtained, or if it is found that more than one member of a family has the same pruritic skin trouble, we have strong presumptive evidence as to the nature of the affliction with which we are dealing. The itching of scabies is always much worse at night than during the day.

An examination of the skin shows evidence of scratching, particularly small excoriated papules or vesicles the size of a pin-head or smaller. The scabetic burrow, a straight or zigzag, slightly elevated line, from  $\frac{1}{8}$  to  $\frac{1}{2}$  inch in length, cannot always be found but should be looked for in the interdigital spaces and on the breasts in the female and the shaft of the penis in the male.

The location of the eruption is characteristic in that it very rarely occurs above the base of the neck. It is apt to be more profuse on the abdomen, the wrists and the anterior borders of the axillae. If present on the penis it is of diagnostic importance in that only a few skin diseases occur in this location and those that do are not likely to be confused with scabies.

The hands, in those who wash them frequently, may show no lesions at all.

In those in whom the disease has been long neglected eczema and impetigo are apt to be super-

added and these cases are sometimes termed Norwegian itch.

Patients who are naturally cleanly are apt to take frequent and thorough baths as soon as they have become annoyed by the itching and in such cases the eruption is apt to be scanty and the diagnosis more difficult.

#### TREATMENT

The main points regarding the treatment of scabies have already been mentioned.

In order to be sure that patients carry out the routine properly it is customary to supply them with printed directions. Those which I furnish read as follows:

##### 1ST NIGHT

Take a warm bath for half an hour, using plenty of soap and a wash cloth. Apply salve to entire body except head, face, and neck, using plenty of it and rubbing it in thoroughly with the hands. If there is any eruption on the hands, rub them with the ointment after finishing with the body; then put on cotton gloves and keep them on all night. Wear the same underclothes and night clothes until the treatment is finished.

##### 2ND NIGHT

Repeat the application of the salve. (No more baths until the treatment is finished.)

##### 3RD NIGHT

Another application of the salve.

The next morning take an ordinary cleansing bath, put on clean underclothes and change the bed linen.

Do not apply any more salve after the third night; if there should be any more itching it is probably due to another cause and requires different treatment.

#### SACROCOCCYGEAL TUMORS\*

with report of two cases

HENRY E. UTTER, M. D.

AND

REUBEN C. BATES, M. D.

Neoplasms and cysts of the sacrococcygeal regions have been reported by a few writers. While by no means of common occurrence they appear as a cause of obstinate constipation in infancy. Doubtless more cases would be reported

\*Read before the Keen Club, June 1926.

if a rectal examination was included in the routine physical examination of the constipated infant. Most of the constipation witnessed in early life is functional in character, but occasionally we meet with obstruction to the passage of feces in the rectal canal.

#### *Classification:*

Ewing stated that embryonal structures giving rise to sacrococcygeal tumors are chiefly the fovea coccygea, and the coccygeal vestiges of the neural canal, the neurenteric canal, the postanal gut and the proctodeal membrane. The tumors resulting are:

1. Dermoids: Simple as pilonidal cysts, and complex, containing bones or hair and teeth.

2. Teratoid tumors: Solid and cystic, occurring at the lower end of the spinal column and anterior to the sacrum and coccyx. Generally the spinal dura is not involved.

3. Teratomata: Containing certain definite organs as scapula, kidney, brain, etc., and generally occurring posterior to the sacrum and often associated with spinal bifida.

Many of these tumors are congenital in origin; some degenerate and cause complications in adult life.

Dermoids are described in Keen's Surgery as "Tumors furnished with skin occurring in situations where this structure is not found under normal conditions." In its simplest condition a dermoid has the form of a more or less globular sac or cyst; its inner wall is lined with stratified epithelium furnished with hair and sebaceous gland, and often with sweat glands. These constitutions with excretions from glands accumulate within the sac and slowly distend it.

#### *Etiology:*

The exact cause of these tumors is unknown. Bolognesi (2) states that the site of predilection is the sacrococcygeal region. He also believes these tumors to be monstrosities rather than neoplasms. Keen says that where two embryos are conjoined, one going on to complete development, and the other attaining this only in certain parts, the result is a parasitic fetus. Ewing believes that simple tumors exhibiting tissues or organs similar to that found in the immediate neighborhood are probably monogerminal in origin, and due to budding processes or impurities in specific germ layers.

Dermoids of the sacrococcygeal regions are very similar to hairy cysts found in other regions. They may degenerate early and end in infection, abscess, fistula, or may become malignant. Parin (3) reports fifteen cases of congenital tumors, and six of these became malignant and formed metastases. In his series of 122 cases of tumors of the sacral regions, Kiderlen in 1899 found twenty-five to be dermoid cysts. When situated in the typical position it was found that the tumor forced the anus forward and the sacrum and coccyx backward. Stoner (4) believes that all rectal fistulae are the result of abscess formation, and that many originate from dermoid cysts being forced through the rectum during labor.

#### *Diagnosis:*

The importance of a good history cannot be over-emphasized. Constipation may be variable in degree with periods of freedom, particularly when the stool is loose in character and easily forced beyond the obstructing point. Occasionally in the course of the growth of these tumors difficulties may arise from impaction of the rectum, sometimes with vomiting or regurgitation as well as flatulence and abdominal distention.

Positive diagnosis can only be made by rectal examination. A globular or irregular shaped mass may be felt in the hollow of the sacrum which pushes the posterior wall of the rectum forward. This mass may be definitely outlined, and may extend into the soft tissues of the pelvis.

The rectal examination alone can differentiate these tumors from partial atresia of the anus or rectum. Under the latter condition, constricting bands of circular rectal fibres may be felt from one-half to two inches inside the sphincter ani. In this condition there is absence of the globular mass in the hollow of the sacrum.

Gaunt states that the tumor must be differentiated from a meningocele. The Roentgen-ray may be used for this purpose although in most cases the character of the mass can be ascertained only by operation. A meningocele in this region is rare.

#### *Treatment:*

Surgical removal of the tumor should be performed as soon as the diagnosis is assured. Possibility of injury to the rectum with resulting fistula often renders the operation difficult. Operative complications are dangerous because of the possi-

bility of infection from the anus as well from the spinal cord due to the close association of the tumor with anterior spina bifida. Occasionally the abdominal cavity has been entered during the removal of these masses. Excision is generally curative and followed by a lower mortality than other procedures. When the mass is cystic, precautions should be taken to avoid injuring the capsule.

Prognosis depends on the age of the patient and the relation of the tumor to the rectum and cord. The mortality runs high because the operation is tedious, and of close proximity to the spinal cord.

#### REPORT OF CASES

Case 1. S. B., Female Child, age 5 months. F. H., Negative.

P. H. She was the first born of healthy parents. Her birth had been normal in every respect. She was nursed but three days during which time the mother stated that the baby constantly refused the breast. She was placed upon artificial feeding and had gained satisfactorily. Her birth weight was 5 pounds and when first seen, weighed 12 pounds 13 ounces.

P. I. The present illness dated back four days at which time she commenced to vomit. This vomiting appeared after feeding and was more in the nature of regurgitation. There had been 3 to 4 hard constipated stools after the use of castor oil.

At the first visit, September 14, 1920, the milk formula was altered and one week later she had gained 5 ounces. The constipation persisted and rectal examination revealed a somewhat flattened tumor mass in the hollow of the sacrum. This mass, about 6cm in diameter, was firm, slightly movable and easily outlined. The surface was smooth and not attached to the rectum. Seven weeks later, December 13, the mother reported while on a visit in New York City there had been no stool for 4 days and a physician was called, who found it necessary to unpack the rectum.

On January 3, 1921 another examination was made. The mass was much larger and the rectum again necessitated unpacking. Magnesia and mineral oil were constantly used to keep the stools soft. From January 3 to January 18, the constipation became much more pronounced and she was referred to Dr. L. C. Kingman for operation.

#### *Pathological Report:*

Specimen consisted of a large, cup-shaped sac with thickened walls and a rigid lining surface.

Microscopically: the cyst wall consisted mainly of smooth muscle tissue with scant connective tissue stroma. Lining of cyst lumen apparently smooth. No signs of malignancy observed.

#### *Subsequent Notes:*

Rectal examinations six months and six years after operation failed to show any recurrence of this tumor.

Case 11, J. B., Female child, age 7½ months.

F. H., father and mother healthy, 3 other children living and well.

P. H., the baby was normal at birth and weighed 8 pounds 2 ounces. She was artificially fed and had done fairly well, weighing 15 pounds 2 ounces at first visit, April 5, 1920.

P. I., She had gained but 12 ounces in the previous five weeks. During her infancy there had been considerable vomiting. There also existed a stricture of the rectum, just inside of the anus, which had been dilated manually once a week. The bowels were constipated but at no time had it been found necessary to unpack the lower bowel;

#### *Physical Examination:*

This was negative except for the rectal examination. Just inside the anus a circular stricture of the lower rectum was revealed. This was easily dilated and upon further digital manipulation there was felt a round mass about 3 cm in diameter in the hollow of the sacrum.

On May 21 the constipation had increased, although the infant was gaining weight and developing satisfactorily. The tumor had increased in size. On May 28, she was operated upon by Dr. H. H. Germaine. A mass was found between the sacrum and the rectum. This tumor was formed of multiple cysts, one of which contained pus. Others contained sebaceous matter. Three days later, temperature as high as 104 appeared. There was a purulent discharge from the wound. The temperature remained persistently high and the toxæmia increased until June 5, upon which day the baby died.

#### *Summary:*

These two cases show the necessity of rectal examination in all cases of severe constipation appearing in infancy. While of rare occurrence,



tumors of the sacroccocygeal region are occasionally found and can be diagnosed only by rectal examination.

#### REFERENCES

1. Keen's Surgery, Phila., and London, W. B. Saunders Co.
2. Bolognesi, Neoplasmes, Paris.  
Abst. J. AM. M. Assoc. 1922 lxxix 1903.
3. Parin, Wasile: Beitrag zur Kenntris der Augebornen prasakral sitzenden Geschwulste. Deutsche Ztschn.F.Chir.
4. Stoner, A. P.: The significance of Sacroccocygeal Dermoids in Relation to Rectal Disease, J. Iowa State M. Soc., 1922., x; 145-147.
5. Gaunt, S. G. Diseases of the Rectum, Anus and Colon. W. B. Saunders Co., Phila. & London.

#### REPORT OF DELEGATE TO AMERICAN MEDICAL ASSOCIATION.\*

BY ROLAND HAMMOND, M.D.

PROVIDENCE, R. I.

The recent meeting in Washington proved to be one of the most successful in the history of the Association. The attendance was large and representative of the continent of the United States and her outlying possessions as well. The sections were well attended and the papers presented were of an unusually high standard. The scientific exhibits were more extensive than in former years and contained some noteworthy features, particularly a fracture exhibit occupying six or eight booths. Here were demonstrated special methods of splinting and the use of plaster of Paris by a large corp of surgeons. The Commercial Exhibit was complete in every particular and is proving itself a valuable attraction which no one should miss.

As a place of meeting Washington proved most alluring. The most outstanding criticism came from the fact that the section meeting places and Registration Bureau were so widely separated that much time was lost in going from one to another.

\*Read before the Annual Meeting of the Rhode Island Medical Society, June 2, 1927.

As a city of much beauty and interest to every American, and containing so many shrines and National monuments, it was inevitable that Washington should prove distracting to those attending this meeting. There were numerous memorial exercises both in the amphitheatre at Arlington for physicians who died in the World War and at Mt. Vernon, where wreaths were placed upon the tombs of General Washington and Martha Washington. The presence of the President of the United States at the opening meeting on Tuesday evening was one of the high spots of the meeting.

The House of Delegates, to which your delegate is accredited, is a hard working body and much important legislation was enacted. The most spectacular part of the proceedings was released each day and has been read in the daily press by all of you long before this. There are, however, several important matters as well as interesting sidelights which are worth recording.

It is estimated that by 1965 the population of this country will be one hundred and sixty-five millions. It will be necessary to train more physicians to meet the demands of that population and the training must begin very soon. It is felt that medical courses should place more emphasis upon training general practitioners and less for the specialists, which should be reserved for post graduate work.

It was voted that in the future all resolutions regarding the alcohol question should be referred at once to the Board of Trustees for investigation and not brought up on the floor of the House.

It was also voted that circular letters regarding periodic health examination should be revised by the Board of Trustees before being sent out by County Medical Societies.

The Constitution of the Association was amended so that the House of Delegates shall have the power to discipline or expel a member of the American Medical Association or a fellow of the Scientific Assembly. This means that the Association has the right to control its own membership but has no control over the membership of County or State societies.

The training of nurses was considered to be in a deplorable state. Too much emphasis is being placed upon academic training and too little upon the producing of a practical working nurse. Five

thousand dollars was appropriated to investigate this situation.

In past years there has been much discussion regarding a home for disabled physicians to be founded and financed by the American Medical Association. A survey of the country seems to indicate that there is not sufficient need to warrant establishing such a home.

It was recommended that reports to Insurance Companies regarding the condition of patients should be made at not less than the regular fees charged for private patients in that particular community.

A resolution was adopted petitioning the Collector of Internal Revenue to permit physicians to deduct bills for illness in a physician's family, including nursing and hospital charges.

The incoming President, Doctor Jabez North Jackson, has announced that his policy during his administration will be to endeavor to inculcate a higher standard of ethics in the medical profession.

Doctor William S. Thayer, of Baltimore was chosen President-Elect for the ensuing year and Minneapolis was selected as the place of meeting. It is interesting to appreciate the requirements of any city selected as a place of meeting of the American Medical Association. Eight thousand people are brought into a city during the session. Fifty thousand square feet of exhibition space are necessary; ten meeting places must be provided for the different sections and one large meeting place for the opening meeting and for the President's reception. Care must be taken that there is no overcharge of hotel rates and taxi fares. It is estimated that five hundred thousand dollars are spent in any city during this meeting.

In conclusion, I wish to add my testimony to the splendid work which the American Medical Association is doing for the medical profession in this country. Its officers are hard working and self-sacrificing and much time is spent at great personal sacrifice to practice, time and money. I wish to thank the Society for the confidence reposed in me and I feel that as more experience is gained in the House of Delegates the individual delegate becomes more valuable in representing the interests of his constituency.

## MISCELLANEOUS

### PAIN

M. J. Hubeny, Chicago (*Journal A. M. A.*, July 23, 1927), says that the experience of roentgenologists shows that the severity, persistence or total absence of pain are often at variance with the magnitude of the disease; also that many combinations or complications exist. Roentgen-ray diagnosis often assists in explaining the cause of pain because it reduces the intangible to the tangible. All roentgenologists have seen many cases in which pain or the absence of pain assisted in either proving or disproving a clinical diagnosis, which syndrome could be explained by a thorough roentgenologic examination.

### STUDIES ON VARICELLA

A. Graeme Mitchell and E. Gordon Fletcher, Cincinnati (*Journal A. M. A.*, July 23, 1927), believe that confusion of the disease with variola occurs often enough to warrant the presentation of certain data derived from a statistical study of 775 cases of varicella. Of the 775 cases, 1.4 per cent occurred in patients under 6 months of age; 11.7 per cent in those from 6 months to 2 years; 36.4 per cent in those from 2 to 6 years; 24.2 per cent in those from 6 to 12 years; 6.8 per cent in those from 12 to 20 years, and 19.4 per cent in those above 20 years. Of the 11 cases occurring in infants under 6 months of age, the distribution was as follows: In one the eruption was present at birth, the mother suffering from the disease; one occurred at 3 weeks of age; two at 1 month; two at 3 months; one at 4 months; two at 5 months, and in two the exact age was not known, although the infants were only a few months old. Of the 150 cases in persons above 20 years of age, 118 were in patients between 20 and 30 years of age; 26 in those between 30 and 40 years, and six in persons over 40 years, the oldest being 55 years of age. The largest number of adults in this series does not give a true estimate of the age incidence of varicella. Many of these patients were sent to the hospital with a diagnosis of variola, and a few were nurses, physicians and attendants who contracted the disease on exposure in the hospital.

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Dr. J. J. Gilbert President; Dr. M. J. O'Connor Secretary-Treasurer.

**The R. I. Medico-Legal Society**—Last Thursday—January, April, June and October. Dr. Creighton W. Skelton President; Dr. Jacob S. Kelley, Secretary-Treasurer.

## EDITORIALS

### THE TEACHING HOSPITAL

"You must realize that this is not a teaching hospital." How often have we heard this offered as a complete and unassailable excuse for inadequate equipment or inefficient methods in a hospital not directly connected with a medical school. And the pity is that the statement is made in all good faith and is usually accepted without question. It might be well, however, to

consider carefully whether any hospital can perform its function without being, in a very real sense, a "teaching hospital."

The primary purpose of a hospital is the care of sick patients, and many would say that this is the only purpose. But they forget that the care of patients involves trained personnel, chiefly doctors and nurses. For years it has been recognized that the training of nurses is a hospital problem, and so we have our hospital training schools doing excellent work in the teaching of nurses. It is harder for us to realize that the hospital must train its doctors. The internship is post-graduate medical



work and should be recognized and treated as such. It should involve not only the performance of work without which it would be extremely difficult for us to run our hospitals, but careful and systematic instruction in practical medical and surgical subjects by well-qualified members of the visiting staff. Only in this way can the hospital properly supplement the very sketchy outline which is the best that any medical school can hope to give its students in the formal course; and failure of the hospital at this point means a poorly trained medical personnel with its inevitable effect on the treatment of patients. And this training must also be given to the younger members of the visiting staff to fit them for the more important work which will come to them in the course of years.

Training of personnel, then, is a matter of vital importance to every hospital, and the institution which is not truly a "teaching hospital" is not fulfilling its duty to its patients or to the community which it serves.

#### THE LIMITS OF KNOWLEDGE

When our youthful enthusiasm has been tempered by many a mistake and by a wider experience, it dawns upon most of us how hollow is much that we take for knowledge and how solid is our ignorance. Once, as young physicians, how trippingly certain popular words came to our tongues. They were current coin in the realm of medicine and we took them at their face value. Patients who complained of more or less prolonged and refractory fatigue were suffering from "neurasthenia"; most joint diseases were due to "uric acid diathesis"; the fleeting aches of children were "growing pains"; dyspepsias were caused by "biliousness" or a "torpid liver"; depressed moods, fears and anxieties were "just nerves," and so on through a long list of medical shibboleths. In those pleasant days diagnosis was easy because we were sure of ourselves and confident in our powers to solve the most perplexing difficulties. We had read our textbooks, attended the clinics and listened to our professors so that, as we thought, our future course was to be smooth sailing.

Then, as we grew older, our satisfaction with our diagnostic acumen began to lose some of its early glamor: we were discovering that the attainment of real knowledge is a very difficult thing.

As we learned to distinguish between words and things, as we experienced the ease with which our eyes and ears and finger-tips tricked us into serious errors, presenting us with mere appearance rather than with reality, as, once more, we discovered that even our instruments of precision left us in the void, we began to apprehend for ourselves that experience is fallacious and judgment difficult. If, perhaps, we were brave enough to attend a few autopsies we soon acquired the salutary habit of mistrusting our most infallible opinions. And so it came about that we were acquiring the beginnings of wisdom.

At first sight it would appear that the accumulation of knowledge should make diagnosis, and therefore treatment, more easy and efficient; yet is it not true that the more facts we know the more difficult is their manipulation? With what lightness of heart Francis Bacon took all knowledge for his province! If he were alive today he would doubtless find one corner of knowledge to be more than he could master. In Medicine a similar condition prevails. Think of how nephritis has multiplied its varieties since the days of Richard Bright. We can very easily imagine the surprise with which Addison would read a modern account of diseases of the blood. Hodgkin would be amazed at the number of things which may go wrong with lymph-glands. Corrigan and Stokes might have difficulty in using a polygraph and Graves would acknowledge himself a mere child in the study of the thyroid gland. It is becoming more and more difficult to remain above our knowledge rather than to be buried by it. Our riches have literally embarrassed us and the very things we know make us painfully conscious of the limitations of our knowledge.

Hence the vogue of specialism with its intensive vision and its narrow horizon. As Trousseau remarked to his pupils we are in danger of missing the wider view and of losing ourselves in an abyss of infinitesimals. Pre-occupation with cells may blind us to the man whose cells they are, and the study of the infinitely little may dim our sight for the relatively large. The upshot of it all is that the specialist should be constantly engaged in preventing himself from becoming a mere specialist while the general practitioner should be as much of a specialist as his powers and his opportunities permit.

## HOSPITALS

### THE MEMORIAL HOSPITAL

The following is a copy of the minutes of the Memorial Hospital Staff meeting held June 9, 1927:

"Meeting called to order by President Wheaton at 9:00 P. M. Record of attendance taken. Eighteen members were present. Minutes of the previous meeting read and approved. Report of Medical Service, Orthopedic Service and Surgical Service read. Dr. Earl Kelley read a very interesting paper on 'Congenital Lues.' Paper discussed by Dr. R. C. Bates and Dr. B. Feinberg. A motion was passed that no meeting be held during the months of July and August. Adjourned at 10:15 P. M."

JOHN F. KENNEY, M.D., *Secretary*

## BOOK REVIEWS

### PERSONAL AND COMMUNITY HEALTH

by

CLAIRE ELSMERE TURNER

Associate Professor of Biology and Public Health in the Massachusetts Institute of Technology.

C. V. Mosby Co., *Publishers*  
St. Louis, 1925

This is an excellent and comprehensive yet concise book upon personal and public hygiene. It contains seventeen chapters on such subjects as, health values, personal hygiene including hygiene of nutrition, of cerebral nervous system, of reproduction, of the mouth and of sex. It deals with public health administration including the control of communicable diseases, water and food supplies, waste disposal, school and industrial hygiene, ventilation, heating and lighting. In an appendix are rules adopted by the American Public Health Association for the control of infectious diseases.

The author received his training under Dr. Sedgwick of M. I. T. He has treated the subjects discussed in a scientific yet rational manner.

The book contains 426 pages and is little larger than a hand book.

### GENERAL SURGERY

#### Practical Medicine Series, 1924

Albert J. Ochsner, M.D., F. R. M. S., LL.D.,  
F. A. C. S., F. R. C. S. Ir. (Hon), Major,  
M. R. C., U. S. Army, President  
American College of Surgeons, etc.

The Year Book Publishers, Chicago

Following out the general plan of the volumes in this series, this book reviews the more important contributions to surgical literature appearing in the year preceding its issue. It provides a carefully compiled and fairly comprehensive resume of the recent advances in this field. The abstracts are of sufficient length to bring out the important ideas of the original article, but this very fact gives the work an almost encyclopedic character which makes it somewhat difficult to read with satisfaction. In the realm of anesthesia nitrous oxid is treated rather superficially, but the discussion on ethylene is of great interest. The advance of regional methods of anesthesia is described in some detail. The use of insulin in the surgery of diabetes is a distinct advance. In the section on new growths the editor approves the following formula as expressing the etiology of cancer: heredity + stimulation + infection = cancer. The reduction of increased intracranial pressure by repeated lumbar drainage and the administration of hypertonic saline solutions is shown to be productive of better results than is the expectant treatment. Abdominoscopy is brought forward as a new means of diagnosis available with but slight risk to the patient. The relation of peptic ulcer to streptococcic foci is again stressed, as is the presence of skin hyperesthesia in acute appendicitis. In general the work will be found to be of considerable value in enabling the reader to keep abreast of recent clinical surgery.

### NURSERY GUIDE

BY LOUIS W. SAUER, Ph.D., M.D.  
Second Revised Edition

C. V. Mosby Company, Publishers  
St. Louis, Mo.

The general scope of this book covers the Prenatal period to the pre-school child. The first chapter describes the many ailments seen during

the early months and has enlightening information for the average mother regarding the teething period. The chapters on nursing and prematurity are well written while physicians as well as laymen can learn a great deal regarding milk and its preparation for infants from the chapter on "Artificial Feeding." The chapters devoted to common ailments and care of the sick infant were very brief but concise. The book is well written, brief and practical and should be a welcome addition to the library of those people having children under their care.

### SOCIAL CONTROL OF THE FEEBLEMINDED.

A Study of Social Progress and Attitudes in  
Relation to the Problems of Mental Deficiency

BY STANLEY P. DAVIES, Ph.D.

Published by The National Committee for Mental  
Hygiene, Inc.

NEW YORK

The author describes his concept of feeble-mindedness as a legal, sociological or psychological term rather than a biological one based on the inheritance of an elementary trait. He tends to combine the sociological and legal definitions (1) of the Royal College of Physicians of London with the psychological definition (2) of Dr. Leta S. Hollingworth and considers the feeble-minded person as (1) "one who is capable of earning a living under favorable circumstances, but is incapable, from mental defect existing from birth, or from early age, (a) of competing on equal terms with his normal fellows; or (b) of managing himself and his affairs with ordinary prudence;" and as (2) "one who has originally an intelligence quotient of 70% or less, and whose status falls in the lowest 2% of human intellect." His exposition of the historical development of the various social and individual attitudes which have been taken in regard to mental deficiency from the time of Aristotle down to the present can be well summarized under the key words, superstition, segregation, sterilization, salvaging.

The essential ideas of the book are thoroughly developed and will be briefly stated. The modern

trend in the treatment of the feeble-minded is to segregate in institutions those who are extremely low in the scale of intelligence and those who show moral, emotional, or criminal deficiency which cannot be overcome after numerous attempts; to sterilize those in whom segregation fails to function eugenically, that is, those cases who get into sexual difficulties after they are sent back to or escape to the community from institutions; and to return gradually but finally to the community the majority of the feeble-minded through social adaptation and education which can be given by institutions, colonies, paroles, and social supervision. Through this education, which teaches them to get along in the community by making the most of their innate capacities, marked improvements in physical and muscular development, in habits, in behavior, in self help, and in occupational ability occur.

In the school the chief factors in the treatment of the feeble-minded are early recognition, adequate training, proper supervision, and final segregation of those who are a menace to the community.

Morons often do best in an institution between the ages of 14 to 18 years, as in it their environment can be modified sufficiently to change their behavior and to instill desirable social qualities. During this time they can be reached through the realm of ideals which do not depend entirely on the intelligence but depend much in the feeble-minded as in the normal upon the instinctive and emotional makeup of the individual. This training often will control their behavior for the rest of their lives, as it is as difficult for them to unlearn as it was to learn (Fernald). Feeble-minded boys can be more freely returned to the community than feeble-minded girls, since they are not usually sexually aggressive and are not sought sexually.

The fifty per cent of all the cases of mental deficiency which are believed to be not hereditary are the most hopeful from the standpoint of therapy, since they seem to have many desirable social traits and to show no physical underdevelopment such as occurs in the hereditary type.

To read this book is to secure an adequate cultural knowledge of the problems of the feeble-minded.





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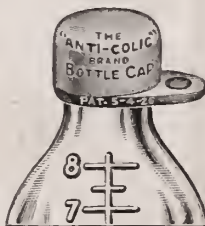
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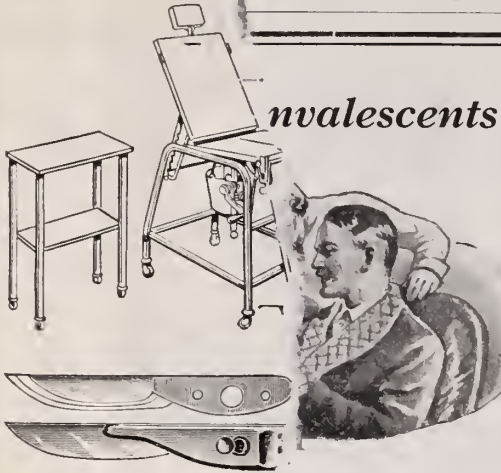
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## ORIGINAL ARTICLES

### CYSTIC APPENDIX\*

By DR. WILLIAM P. DAVIS  
PROVIDENCE, R. I.

Closely associated with the cystic degeneration of the ovary is the cystic degeneration of the appendix, presenting much the same signs and symptoms and making diagnosis almost impossible. In fact, due to the rarity of this condition, and its simulation to other conditions, I have been unable to find, in literature, one case diagnosed correctly as cystic appendix before operation or before post mortem.

The presence of the appendiceal cyst in itself is of little import, but complications arising therefrom are sufficient to give the condition more than passing thought and with this in mind, I have undertaken a short review of the literature on the subject.

In size, the appendiceal cyst may vary considerably. As a rule it is small but one has been reported to have reached the size of a man's head. (Boyd)

Formation of the cyst is thought to take place through gradual closure of the cavity of the appendix, generally at the caecum, by scar tissue or adhesions, plus the sterilization of the mucosa, lining the tract of the appendix distal to the obstruction. Gradual closure being necessary because sudden blocking of the lumen of the appendix has been found on experimentation, to produce gangrene though the circulation to the appendix has remained unchanged. And sterilization to prevent bacterial changes, slow drainage of the pathogenic organisms into the caecum taking place.

As the cavity of the appendix is shut off from that of the caecum, it becomes distended with mucous and a cyst of similar origin as the Hydro-salpinx is formed. The immediate cause may be obscure. Generally hydrops is primary with mild inflammation of the mucosa lining the tube. Later

the distension of the cyst is due to exudation of non-inflammatory nature and to atrophy of the mucous coat, such that no sign of inflammatory change may be found in the mucous lining.

Not always has there been found a complete obstruction between the appendiceal and caecal cavities and in these cases the contents of the cyst have been thick and tenacious.

Normally the secretion of the appendix is similar to that of the caecum, but as the cyst forms the secretion becomes serous, mucinous or pseudomucinous in character.

And where the cystic appendix is rare in itself, the serous type or hydrops, is extremely rare and I shall not pause to more than mention it.

Of interest I found one case of *Ecchinococcus* Cyst of the appendix reported in the *J. A. M. A.* by Brewer. A Chinese soldier, age 32, had had three attacks of abdominal pain in the past ten years. This attack, the fourth, of 24 hours duration consisting of severe epigastric colic, vomiting, deep tenderness over McBurney's point, no rigidity, T. 99.4 and WBC 13,800. At operation, the proximal half of the appendiceal cyst found was bound down to the ileo-caecal junction by peritoneum. The cyst was 8 cm. long and 1.5 cm. in diameter, smooth, white, distended, fluctuant and with possible hydrated fremitus.

Upon opening the mass, there was found a cystic cavity with many secondary and tertiary cysts and extending from the tip to the narrowed base where the lumen was obliterated. Diagnosis was *Ecchinococcus* cyst of the appendix.

Most commonly found is the pseudomucinous cyst, the contents of which are mucinous in character, resembling mucin but not having the characteristic mucin reaction with acetic acid.

The diagnosis of cystic appendix may easily be confused with any of the surgical conditions related to the R. L. Q. Most frequent being ovarian cyst, acute appendicitis and appendiceal abscess.

Generalized conditions such as influenza and typhoid fever must be excluded.

Since the cystic appendix follows so closely other conditions of the appendix, I may quote Zachary Cope—"To catalogue the diseases which

\*Read before the Memorial Hospital Staff.

may simulate or be simulated by appendicitis is to enumerate all the chief acute abdominal diseases." The same may well be stated concerning cystic appendix.

The signs and symptoms follow those of appendicitis. Pain in the R. L. Q., vomiting, nausea, anorexia and localized tenderness. There may be repeated attacks.

In uncomplicated cases there is less likelihood of elevation of temperature or pulse or of muscle spasm and due to the palpable mass present in a number of cases the diagnosis has been confused with that of ovarian cyst.

Now if the diagnosis is not made nor operation carefully performed, in time the thin walls of the pseudomucinous cyst may rupture, spilling its contents into the peritoneal cavity, generally unaccompanied by symptoms denoting the change in conditions.

The cystic contents become implanted on the peritoneum producing proliferation with formation of large masses like frog spawn, covering the visceral and parietal peritoneum—*pseudomucinous-peritonei*. This is probably due to the implantation of epithelial cells on the peritoneal surface where they produce mucinous secretion.

The peritoneum reacts forming a fine pedicle of fibrin over the mucoid material which organizes to a thin vascular membrane. Fine fibrous septa are sent up by the peritoneum between the lobulations of the masses. The abdominal organs may all be covered and the omentum surrounded and infiltrated producing the broad thick "Omental cake."

The prognosis of pseudomucinous peritonei is very unfavorable for the majority of cases are fatal though the condition is of long duration. The origin is more frequently from cystic ovary than from cystic appendix due to the rarity of the latter and when arising from cystic appendix there have occurred more cases in men than in women.

The first case reported was found at P. M. by Frankel in 1901. In 1910 Trotter published the tenth case, only two patients having recovered in these ten cases.

The treatment consists of repeated opening of the abdominal cavity and of washing out the abdominal cavity with saline in the attempt to remove as much of the pseudomucinous material as possible.

The cyst may become a *mechanical* factor in the production of a surgical abdomen as may be illustrated by a case reported by Dubs.

The condition of this patient before operation was considered very poor.

The abdomen was opened and found to contain 1½ liters of stinking hemorrhagic fluid. A huge convolution of bluish-black intestine filled the wound. Immediately joining the caecum was found about four inches of normal ileum and then obstruction. Wound around the obstructed loop of ileum and provided with an extensive pedicle which connected with the middle third of the appendix was found a cyst so located as to cause the obstruction. And about this strangulated loop of ileum as a turning point an extensive volvulus of the small intestine had occurred which involved the entire ileum and a portion of the jejunum. Collapse of the patient rendered inadvisable such extensive resection. However the appendiceal cyst was removed and found to be pseudomucinous in character.

A very interesting case of pseudomucinous appendiceal cyst was reported by Bailey of St. Louis in 1916.

A male, 25 years of age, was well until one year previous to this history when he was taken ill with an attack of acute appendicitis and at operation it was found that the appendix had ruptured. Nothing was done further than drainage and he made an uneventful recovery. However the sinus formed continued to discharge at intervals and he developed attacks of pain in the R. L. Q. associated with anorexia, loss of weight and constipation.

Upon examination he presented tenderness over the entire right side exaggerated over the scar from the previous operation and spasm of the right rectus muscle.

In the sinus was an exudate containing flakes of gelatinous appearing material. The appendix was located and found to be large, doubled upon itself and fixed by bands which constricted it just proximal to its tip which was markedly distended. Closely associated to the appendix was a large omental tumor. The bed of the appendix was filled with about 2 oz. of gelatinous substance. Upon dissection it was found that a smooth walled tumor mass projected from the append. between the layers of the mesenteriole, thin and fluctuant.



This mass was found to be a cyst containing gelatinous material which communicated with the distended portion of the tip through a narrow opening. The lumen of the remaining part of the appendix was obliterated. The lining of the cyst was similar to that of the distended portion of the appendix. No pseudomucinous material was reported at the previous operation.

I have been able to find but one case of cystic appendix from the records of the Memorial Hospital, which case I am reporting after gaining permission from Dr. Moore upon whose service the patient was admitted and was operated.

I have searched through the files of the Rhode Island Hospital and have failed to find one single case of similar condition.

#### PSEUDO-MYXOMATOUS CYST APPENDIX Case Report.

An American housewife, age 32, was admitted to the Memorial Hospital, Pawtucket, R. I., on Aug. 22, 1926, with the diagnosis of Chr. Appendicitis and cystic ovary.

Her chief complaint is pain in the Rt. side of her abdomen.

Her family and past histories are neg. with the exception that she has one brother who is living but is suffering from tbc, with whom she has associated considerably. She has had night sweats but not for some time. She has had the usual childhood diseases, grippe every winter and erysipelas 1 yr. ago.

For the past 9 yrs. she has had recurrent attacks of pain in the right side. 8 wks. ago had a severe attack which lasted 1½ wks. 3 wks. ago the attack again recurred with nausea. The pain has continued on and off daily since then, having pain many times during the day, the severity proportioned to the activity of the patient and seems to think the pain to be lessened after eating. No vomiting except on the first day of her attack but frequently nauseated, especially in the morning. Bowels regular.

Physical examination presents a well developed and nourished white woman lying comfortably in bed without apparent distress. There is a fetid odor to the breath. Chest is negative. Abdomen scaphoid, slightly tense, no spasticity, no masses but marked tenderness over McBurney's point.

Vaginal examination: bilateral cervical tear with much enlargement of anterior lip. Cervix freely

movable. There is definite enlargement in the region of the right appendages. Pt. is mensesuating.

Temp. and pulse are normal. Urine neg.

Aug. 26, 1926, 4 days after admission at which time a D. & C., amputation of the cervix and perineal repair was done, the abdomen was explored. "On opening the abdomen, a large sausage like mass appeared which at first looked like a diverticulum. The mass was found to be an appendix, position as usual but caecum was covered with a thin (apparently congenital) fold of mesentery. Rt. ovary, tube and broad ligament were adherent to the mesentery of small gut. Appendix tense and fluctuant and appeared to be full of fluid. Mass was about 3 inches long and about the size of a man's thumb. The base was broader than usual but smaller in diameter than the rest of the appendix. Appendix removed in the usual manner.

The appendix was opened after operation and the lumen was found to be distended with a transparent glairy mucilaginous substance which did not flow, retaining the form of the distended lumen. The proximal portion of the lumen at the base was obliterated.

Report from the pathological laboratory was cystic appendix.

The patient made an uneventful recovery and was discharged well Sept. 9, 1926.

#### REFERENCES

1. Noble, *Journ. A. M. A.*, Mar. 9, 1912, Vol. LVIII, No. 10.
2. Brewer, *J. A. M. A.*, Vol. 87, No. 13, 1037.
3. Fischer, *Annals Surgery*, No. 64, 1916, Vol. LXIV, 735.
4. Boyd, *Surgical Pathology*, 1925, 332.
5. Bailey, *Surg. Gyn. and Obs.*, 23, 1916.
6. Cope, *The Diagnosis of the Ac. Abd.*
7. Wilson, *Lancet*, Nov. 30, 1912, 1496.
8. Graves, *Gyn. and Obs.*, 1917, 328.
9. Dubs, *Correspondenz—Blatt für Schweizer Aerzte*, 49, 1251, 1919.

#### CHRONIC ULCERATIVE COLITIS\*

CECIL C. DUSTIN, M.D.  
PROVIDENCE, R. I.

For many decades, investigators have searched for the etiology of colitis, and a mass of literature on the subject has accumulated. A review of this

\*Read before the Amos Troupe Club, May 10, 1927.

material is not entirely satisfactory, because of the confusing terminology, and even now physiologists are not entirely agreed upon the normal physiology of the colon, and it must necessarily follow that there is a corresponding confusion regarding the pathology of this portion of the gastro-intestinal canal. During the last decade much progress has been made in the study of chronic ulcerative colitis, probably because of the more general use of the proctoscope and sigmoidoscope, and a better use of the X-ray in studying the colon.

The chronic infectious processes such as tuberculous enteritis, amoebic and bacillary dysentery and actinomycosis of the colon are well understood, but the etiology of the so-called idiopathic ulcerative conditions of the colon is less well known.

In 1924 Barger<sup>1, 2</sup> at the Mayo Clinic announced the discovery of a micro-organism which he believes is the cause of ulcerative colitis. He observed a large series of cases in various stages of the disease and has demonstrated quite conclusively that the ulcerations are the immediate result of miliary submucous abscesses, and from these abscesses he has been able to isolate repeatedly the organism which he believes responsible.

There is considerable evidence that points towards a much more complex etiology for the disease. Probably the majority of cases of ulcerative colitis remain undiagnosed until the disease has progressed for some time. The disease has a decided tendency to run in cycles, with definite exacerbations and remissions. The patients are almost invariably "finicky eaters," and a careful history will reveal a grotesque and often pernicious dietary habit extending over a long period of time.

McCarrison<sup>3, 4, 5</sup> was able to produce ulcerative colitis, among other gastro-intestinal lesions, by feeding deficient diets. By feeding faulty diets over varying periods of time he was able to produce in monkeys and men, diarrhoea, dysentery, dyspepsia, and gastric dilatation, gastric and duodenal ulcers, intussusception, colitis, and failure of colonic function. He does not contend that these conditions are invariably produced by faulty diet, but he does believe that faulty food is often at the bottom of their causation and if natural, well balanced foods were used from birth their occurrence would be lessened. Some of his conclusions regarding his experiments are as follows:

Adequate provision of vitamins is essential for the health of the gastro-intestinal tract.

The absence of growth vitamins is capable of producing pathological changes in the tract which frequently assume the clinical form of colitis.

Deficiency of vitamin C is especially concerned in the production of congestive and haemorrhagic lesions in the tract, and evidence of these may be found in animals which have not shown, during life, any of the clinical signs of scurvy in any notable degree.

A state of ill health of the gastro-intestinal tract may therefore be a pre-scorbutic manifestation of disease due to deficiency of this vitamin, especially when associated with an excess of starch or fat, or both, in the diet.

An impairment of the protective resources of the gastro-intestinal mucosa against infecting agents, due to hemorrhagic infiltration, to atrophy of lymphoid cells and to imperfect production of gastro-intestinal juices, may not only result in infections of the mucous membrane itself, but also passage into the lymph and blood streams of micro-organisms from the bowel.

In this connection it is interesting to note the occurrence of gastro-intestinal pathology in some of the known deficiency diseases, as: scorbutus, rickets, pellagra and primary anemia; the recent investigations seem to place the latter disease in this class.

The part played by colonic stasis, from any cause, must not be overlooked. The improper diets mentioned favor constipation from their deficiency in vegetable matter, and it is impossible to estimate whether the faulty diet or the resulting constipation is more important in favoring the ulceration.

The symptoms in chronic ulcerative colitis are very varied. It is erroneously believed by many that diarrhoea is the most notable symptom. Probably persistent diarrhoea is only a late manifestation. Cabot and Emerson<sup>6</sup> reported diarrhoea in less than half the cases studied, and constipation occurred in severely ulcerated cases. Perhaps this should be expected from the analogy of typhoidal and tuberculous ulcerations which produce in the majority of cases constipation rather than diarrhoea. In only 17% of the 1,495 cases analyzed by McCrae in Osler's "Modern Medicine" was diarrhoea present, though in every case presumably the intestines were extensively ulcerated. Kantor<sup>7, 8</sup> in a recent article has stated that colitis



simulates appendicitis, cholecystitis, gastric and duodenal ulcer, cancer and cardiac disease, depending upon the segment of the colon involved. In my experience tenderness along the colon, particularly in the sigmoid and descending portions, is nearly always present. Of course tenderness in the right hypogastrium or right iliac fossa is very apt to divert the attention from the colon, and unquestionably pain in these regions from colitis, makes the diagnosis more difficult.

Although there is seldom gross blood in the stools, early in the disease, in the majority of stools examined, chemical blood is present and red blood cells can be found microscopically in a freshly passed stool. During the acute exacerbations, when the ulcerations are more extensive, there is usually a period of loose movements, which show pus, blood and an increased amount of mucus.

The roentgenologists are not entirely agreed upon what, from the X-ray examination, permits a diagnosis of colitis. Kantor<sup>7, 8</sup> feels that a positive X-ray diagnosis is possible, but in his papers upon the subject he does not state that the X-ray diagnosis has always been checked by proctoscopy and stool examination. The X-ray findings are, of course, dependent upon a disturbed physiology of the colon, and it is doubtful if the diagnosis of ulcerative colitis can be made definitely, by X-ray examination, alone, at least, with our present knowledge of the disease.

Direct observation of the mucous membrane of the rectum and sigmoid colon is not difficult, and properly carried out need not be painful, and it leaves no doubt as to the condition of these portions of the colon. The ulcerations are by no means confined to the rectum and sigmoid, but they are present here in a large proportion of the cases, and unquestionably more frequent examinations by proctoscope and sigmoidoscope will lead to a higher percentage of accurate diagnoses.

The appearance of the mucosa will depend upon the stage of the disease at which the examination is made. If seen early, or at the beginning of an exacerbation the mucosa is hyperemic, has a granular appearance and does not have the smooth, glistening surface of the normal membrane. A little later small yellow patches will appear. These are the submucous abscesses which are the beginning of the ulcerations. When well advanced the entire rectum and sigmoid will have almost the

character of one large ulceration, bleeding wherever it is touched. As the process heals, either spontaneously or following treatment, there is a gradual extension of the mucous membrane and ulcers then show the deep, sharply defined character. Usually the mucosa between the ulcers shows scarring, and has a peculiar mottled appearance. After the process has healed entirely, the mucosa will still show a mottled marking, the sites of the ulcers being a little lighter than the surrounding areas.

In the chronic cases the mucosa takes on an atrophic appearance, from the repeated ulcerations and the resulting scarring.

The treatment of the disease, until the last few years, has not been very satisfactory. The disease is essentially chronic, probably more chronic than is at present realized, and, as in most chronic diseases, the treatment must be kept up over a long period of time. From reviewing the literature it seems that more attention has been given to the dietary during the past decade, and the efficiency of treatment has improved. Logan<sup>9</sup> has reported encouraging results from vaccines prepared from the organism isolated by Bagen, although a sufficiently large number of cases has not yet been reported to allow for a proper valuation of this method of treatment. Most of the investigators recommend non-irritating diets, and a study of these shows them to be vitamin rich, and it seems that this is a very important step toward rational treatment.

I am impressed by how little we really know of what constitutes a proper diet. Most investigators now designate the accessory food factors as vitamins A, B, C, D, and probably a fifth, E. These are all apparently necessary for the proper development and growth of the young, but their investigation in regard to the nutrition of adults has not progressed very far.

Vitamin A occurs in large amounts in butter, cream, cod-liver oil, and in small amounts in some other animal fats. Egg yolk is rich in this vitamin. It is found in moderate amounts in most cereals and grains, but not in white flour or polished rice. It occurs to a small extent in a few of the fruits, particularly oranges, and still more in tomatoes. Practically all the green vegetables contain it, particularly spinach, while white potato, endive, cabbage and cauliflower contain but little. There is none in yeast.



Vitamin B is water soluble, and often vegetables are robbed of this food factor by boiling, when the cooking water is thrown out. The sugars contain none, fats, cereals and grains very little; glandular meats contain a little more and it is abundant in certain fruits, as citrous fruits, and tomatoes. Apples and pears contain a little, and large amounts are found in beans, raw cabbage, fresh spinach and yeast, and moderate amounts in almost all the fresh greens and vegetables and nuts. It is present in milk and milk products.

Vitamin C is present in many of the food products, but the most common and plentiful sources are: citrous fruits, tomatoes, raw cabbage, carrots, lettuce, onions, turnips. It is variable in milk and milk products, and there is probably none in animal protein foods and dried grains and cereals.

Vitamin D apparently has to do with calcium metabolisms, and is known to occur in cod-liver oil, and vitamin E is believed to influence the metabolisms of iron.

There is evidence that modern methods of cooking and preserving foods in most instances destroys the vitamins or decreases their efficiency. Canned tomato, and condensed and evaporated milk are notable exceptions.

From this brief review it is quite easy to understand how one can take, either through circumstance or ignorance, a deficient diet, over a long period of time; and this can probably more readily occur among the well-to-do than among the poor, because the latter must for economical reasons use more of the coarse vegetables and dried legumes.

A general anti-deficiency diet, either for prevention or cure, must contain, first, fresh food, neither too old nor sterilized by heat; it must contain foods known to be rich in vitamins; and lastly, it should contain fresh animal fats, preferably butter. Such a diet would include fresh fruit and fresh vegetables; fresh meats; and legumes fresh or dried (not canned), peas, and beans; flours made by undermilling the grains, or whole grain flour.

A diet of this nature will also do much to overcome the constipation which must be corrected if normal colon function is to be restored.

On the whole, drug therapy has not been very satisfactory, and for the most part is symptomatic.

Colonic irrigation is not as popular as in years past and, when used, probably a simple saline is most satisfactory. Local applications by rectum may relieve some of the pain and tenesmus during the exacerbations and promote healing in the more stubborn ulcers.

The following is a report of a case of chronic ulcerative colitis:

R. P. First seen in March, 1925. Age 17.

P. I. For six years she had been having periodic attacks of diarrhoea, accompanied by marked anemia and weakness. The diarrhoea was intermittent with constipation. She had spent nearly half her time, since the onset, in convalescent homes and hospitals. While at home, between the visits to the hospitals, she lived chiefly upon a diet of cocoa and bread, generally without butter.

Her past history was unimportant except that domestic conditions had made it possible for her to choose only such foods as she desired, and she had always eaten mainly starches, with very little fat and protein, and almost none of the vitamin carrying foods.

Upon examination the general condition was not remarkable except for the examination of the blood, and the rectum and sigmoid. The blood showed an erythrocyte count of 4,200,800, with a haemoglobin of 40, otherwise normal.

By proctoscopy and sigmoidoscopy, the lower rectum was filled with what appeared to be excess granulation tissue, which bled easily. At the level of the third rectal valve there was an annular constriction which just allowed the passage of the 2 cm. tube. Above this as far as could be seen the mucosa showed numerous shallow ulcerations. Swabbing from the ulcers showed no amoeba or other evidence of intestinal parasites.

The Von Pirquet was negative.

The stools showed pus and blood, with a very slight increase in mucus.

Tissue removed from the rectum showed only a chronic inflammatory condition.

The patient was put on a well balanced diet, rich in vitamin and roughage, which she took well.

Three weeks later, about April 1, she showed an erythrocyte count of 4,816,000, and haemoglobin of 55%. Proctoscopy showed practically no ulceration of the sigmoid and rectum. The mucosa of the rectum was hyperemic, but otherwise was not abnormal. The annular constriction was unchanged, and was thought to be due to repeated

ulceration during the previous years of the disease.

During the next three months her haemoglobin rose to 72%, with a normal erythrocyte count. The rectal mucosa showed no hyperaemia and the stools were normal.

She did not return again for two months, and then showed a haemoglobin of 65, and a slight reduction in erythrocytes. Upon questioning her carefully it was learned that she had given up the prescribed diet, and had returned to the bread and cocoa, with a few apples which a neighbor had told her would cure her condition. She showed numerous ulcers of the rectal and sigmoid mucosa.

She was persuaded to again take up the prescribed diet, and in a month had a normal blood picture, and went to work in a textile mill. When last seen in November, 1926, she was apparently well, and was following her prescribed diet.

This case illustrates the chronic, recurrent tendency in the ulcerative colitis, and it seems to indicate that a poor dietary had much to do with its causation, and cure followed a regulation of the diet.

#### SUMMARY.

Ulcerative colitis is a chronic disease which has a tendency to remission, and is often undiagnosed until in its late stages.

Those afflicted with the disease are almost always people of long-standing poor dietary habits.

Although the immediate cause of the ulcerations is likely infectious in origin, there is experimental and clinical evidence which supports the idea that the disease is fundamentally a deficiency disease.

The most helpful aid in diagnosis is proctoscopy and sigmoidoscopy.

Drug therapy is of value in relieving symptoms, vaccine therapy is apparently a valuable adjunct, but dietary regulation seems to offer most in the treatment of the disease.

Cases diagnosed early apparently have a good prognosis.

#### BIBLIOGRAPHY.

<sup>1</sup>Bargen, J. A. The Etiology of Chronic Ulcerative Colitis. *Archives of Internal Medicine*, Dec. 1925, Vol. 36, pp. 818-829.

<sup>2</sup>Idem: The Etiology and Treatment of Chronic Ulcerative Colitis. *Am. Jour. Roentgenology and Radium Therapy*, Vol. 16, No. 1, pp. 10-16.

<sup>3</sup>McCarrison, Robert. *J. A. M. M.*, Vol. 78, No. 1, Jan. 7, 1922.

<sup>4</sup>Idem: Studies in Deficiency Disease.

<sup>5</sup>Idem: *N. Y. Med. Jour.* Vol. 115, No. 6, Mar. 15, 1922.

<sup>6</sup>Cabot, R. Emerson H. Causes, Types and Treatment of Diarrhoea in Adult Life. *J. A. M. A.* Vol. LXI, pp. 1013-1015, Sept. 27, 1913.

<sup>7</sup>Kantor, J. L. Colitis as a Common Disorder of Digestion. *Am. J. Med. Sciences.* Vol. CLXXII No. 5, pp. 707.

<sup>8</sup>Idem: The Roentgen Diagnosis of Colitis. *Am. J. Roentgenology and Radium Therapy.* Vol. XVII No. 4, pp. 405.

<sup>9</sup>Logan, A. H.: Idiopathic Ulcerative Colitis with Special Reference to Etiology and Treatment. *Ill. Med. Jour.*, Feb. 1926.

### ISOLATION OF AN ORGANISM FROM THE BLOOD WHICH RESEMBLES THE PATHOGENIC YEASTS AND MOLDS, WITH A DISCUSSION OF THE DISEASES CAUSED BY THE LATTER.

By LUCY ELIZABETH BOURN, M.D.

PROVIDENCE, R. I.

#### *Case History and Laboratory Findings*

On December 14, 1918, M. L. J., a girl eight years old, was admitted to the Albany Hospital "with symptoms of an acute appendicitis with perforation. A mass could be felt distinctly in the right hypochondrium. At operation the same evening, the appendix was found acutely flexed with distal half of the organ gangrenous and perforated. The inflammatory mass was well protected with omentum. A small amount of pus was found and evacuated. Drainage was instituted and the patient placed in a semi-reclining position. Later the patient was found to be suffering with typhoid fever." The clinical diagnoses made were acute perforated appendicitis, localized peritonitis, and typhoid fever. Histological examination of the appendix removed at operation showed acute appendicitis with perforation.

On the fourth day after the operation, the patient began to complain of some abdominal pain. Her evening temperature on this day and the succeeding day was 102° F. During the following four days it rose to 104° + F., and remained high during the following week. A white blood count taken on the eighth day showed 28,000 cells per cu. mm.

On the twelfth day after admission, the patient was put in isolation. The following day the patient's blood serum gave a Widal reaction which was only suggestive of a positive reaction for *B. typhosus*. The same was true of the next day's specimen, at which time the white blood count was still high, namely 18,500 cells per cu. mm.



On the fifteenth day a culture from an abscess of the appendectomy wound was negative for *B. typhosus*. On the sixteenth day the patient's stool was examined for typhoid bacilli with negative results. The blood serum again was only suggestive of a positive Widal reaction for *B. typhosus* and negative for *B. Paratyphosus A* and *B.*

On the eighteenth day a blood culture was taken. Upon 48 hours incubation, the broth flask developed a white mold colony, which increased in surface growth until a firm pellicle was formed over the free surface. Upon 96 hours incubation, mold colonies appeared on one of the agar plates. The urine culture of this date proved negative for *B. typhosus* also, and the white blood count was 12,900 cells per cu. mm.

On the twenty-fourth day another blood culture was taken. Again upon 48 hours incubation the mold appeared in the broth flasks, while each of three of the agar plates and the bile broth showed the mold growth after 96 hours incubation and on the following day the fourth agar plate also showed the mold. Control flasks of broth which had been opened in the room where the blood cultures were taken remained sterile.

On the twenty-fifth day the patient's blood serum reacted strongly enough with *B. typhosus* to be reported as a positive Widal for *B. typhosus*. On the twenty-sixth day the patient's white blood count was still high, being 9,900 cells per cu. mm. On the thirty-fifth day the patient was discharged as recovered.

### *Experimental*

Since upon two different occasions the same organism was recovered from the patient's blood, it was thought advisable to test the pathogenic powers of the organism by animal inoculations.

On January 28, 1919, two white rats were inoculated with 1cc. each of an emulsion of the growth from an agar slant. At the end of two months one of them was killed, although not apparently ill. On autopsy, nodules were found in the abdominal wall, liver, omentum, diaphragm and lungs. The organism was recovered in cultures from nodules in the omentum and abdominal wall after six days incubation. Rat No. 2 was killed June 10, 1919. On autopsy, nodules were found in the omentum and the mediastinum. No growth was recovered from these lesions nor from the heart's blood. A

histological study of these lesions was made and will be mentioned later.

### *Discussion of Blastomycosis and Sporotrichosis*

In 1894, Busse in Europe and Gilchrist in America both isolated and studied the organism now recognized as the etiologic factor in blastomycosis. This disease has also been described under the names oidiomycosis and saccharomycosis. The published studies of Busse and Gilchrist are the first on this subject.

"Blastomycosis is typically a subacute or chronic infectious process, usually pulmonary at the onset, but characterized sooner or later by the development of subacute abscesses, few or numerous, localized or widely dispersed over the body and often involving the bony structures, joints and surrounding soft tissues. Pulmonary lesions are at times pneumonic in type, but ultimately are proliferative, suppurative, and destructive, and give many of the signs and appearance of tuberculosis."

By far the greatest majority of cases are found to have occurred in previously healthy adult males, usually living in reduced circumstances. The majority of cases have been reported in Illinois, in Chicago especially, although cases have been reported from all parts of North America, as well as South America, Europe and the Orient. In 1916, 53 per cent. of the North American reported cases were from Chicago, which may be accounted for by any one or all three of the following reasons:

1. Endemic establishment of a particularly pathogenic fungus there.
2. Crowded unhygienic living conditions, especially in winter.
3. Unusual efficiency of medical profession in recognition of the condition and interest in it.

Stober made a study of the living conditions in a number of Chicago's cases, from which he concluded that the molds found in these places point insistently to the adaptability of such fungi to parasitic life in the animal body.

Initial onset in the majority of cases reported are designated either by pulmonary symptoms (cough, expectoration, etc.) or cutaneous or subcutaneous abscesses. This has led some students of the disease to classify the cases as Surgical Blastomycosis and Systemic or Generalized Blastomycosis. Under surgical treatment and potas-



sium iodide, recovery is often made if it is started early. The systemic type is refractory to treatment and recovery is seldom made, death occurring from exhaustion or some intercurrent infection.

The mode of extension of the disease from skin lesions is apparently by way of the blood stream, as lymphnodes are rarely affected and isolation of the organism from the blood stream has been accomplished.

In 1916, Wade and Bel summarized the necropsy findings in the 47 reported North American cases. The distributions of lesions were found to occur in the following organs in diminishing involvement: lungs, skin, bone, spleen, kidneys, liver, lymphnodes (brain, meninges, etc.), pleura, prostate, retropharynx, heart, peritoneum, pancreas, adrenals, muscles (without other involvement), larynx, pericardial cavity, intestines, epididymis, eye, tongue, tonsils, trachea, esophagus, diaphragm and testicle.

It may be added that in one case at least the lesion was found in the appendix.

#### *Case Findings Bearing on the Case in Question*

In 1908, Montgomery and Ormsby published a survey and summary of 22 cases. In two of these cases, blastomycetes was isolated in blood cultures, in three cases the organisms were seen in sections of blood vessels, in five cases it was isolated from the feces in which diarrhea was noted, in five cases from the urine. In eight cases there was more or less leucocytosis, and anemia in four, in two an enlargement of the spleen and in one enlargement of the liver.

In 1872 Popoff inoculated dogs with impure yeasts and obtained septicemic and typhoid conditions, miliary tubercles in the viscera, but blastomycetes were not demonstrated in them.

In 1909, Fontaine, Hasse and Mitchell report a case of systemic blastomycosis with initial pulmonary symptoms in which in the second week the blood serum gave a positive Widal reaction. This substantiates, according to these authors, the findings of Collins, who with repeated inoculations of brewer's yeast into rabbits and goats produced agglutinins in their blood for *B. typhosus* and allied organisms of the dysentery group.

#### *Histological Findings*

"The typical so-called blastomycetes in the tissue lesion does not produce mycelia and does not

form ascospores, but appears and persists in the form of more or less sclerotic, yeast-cell-like bodies which multiply entirely by budding. Isolated and cultivated artificially, it appears usually to be a mold of saprophytic type, growing at room temperature rather more readily than at 37° C., and usually very luxuriantly on bread and potato. Typically it quickly ceases to grow in toruloid form and finally produces a white cottony mycelium."

The histological picture presented in the lesions produced in the animals inoculated with cultures from the case in question and animals inoculated with a similar culture isolated from the urine of a Japanese patient by Dr. Graham is identical with those described by the various students of Blastomycosis and Sporotrichosis. It simulates the military tubercle and consists of fibrous tissue surrounding areas of necrosis which in addition to cellular detritus and exudate show innumerable yeast-like bodies, some of which are budding. Numerous giant cells are also present, some of which include the organism.

Sporotrichosis is the name applied to the second of the best known diseases due to pathogenic yeasts or molds. It is closely related to blastomycosis, but more seems to be definitely known about this disease. The first sporotricha pathogenic for man was studied and reported by Schenck at Johns Hopkins in 1896. In 1917, eighty-five American cases had been reported, fifty-three of which were proved by culture. It is a chronic infection characterized by cutaneous and internal lesions. The internal lesions are rare, and the cutaneous lesions are most commonly found on the fingers, hands, arms, lower extremities, head and eyes. The probable routes of infection are by way of the lymph and blood streams. Infection is usually found to follow the bite of a horse, mouse, hen or wire injury, etc. In sporotrichosis infections, antibodies of various kinds are readily generated, which is in marked contrast to blastomycosis, the closely related disease in which antibodies are apparently generated with great difficulty or not at all.

Davis has obtained repeated positive spore-agglutination tests with serum dilutions varying from 1-320 to 1-80 which parallel the clinical course of the disease. Positive complement fixation tests parallel the agglutination tests. The

antibodies retain their activity in the ice-box for over a year. With various strains of antigens used, apparently like results were obtained, which points to the identity of different strains. Intracutaneous tests with French and American strains both gave strongly positive reactions.

Blastomycetic antigen did not cause this reaction nor did a patient suffering from blastomycosis react to the sporothricosis antigen.

The antigens are stable, resist heat, remain active for over a year, and potassium iodide treatment does not appreciably alter their sporothricosis reaction.

The histological picture presented by the sporotricha is the same as that presented by the blastomycetes.

#### *Conclusion*

There is much that a more complete history of the case might add as a means in aiding one to draw more definite conclusions. It seems, however, from the history presented, and in view of the findings, both clinical and experimental, of the reported cases studied, that this case presented very little on which to base a diagnosis of typhoid fever following acute perforative appendicitis.

On the other hand, no case of recovery from a systemic infection has been reported. This does not exclude, however, such a possibility, for comparatively few cases have been studied, and they have not come to the physician's attention early in their course. It is safe to conclude, therefore, I believe, that infections of this type go by unnoticed, and when accidentally found, are not recognized as such, the organism isolated being looked upon as a contaminant.

In view of these probabilities, either one of two causes may have led to the findings of the organism in the blood of the case in question:

1. It may have been the cause of the acute appendicitis.
2. It may have resided in the appendix as a non-pathogen and escaped into the blood stream with the suppurative and fecal materials upon perforation of the appendix, there setting up a rather severe infection for the time being.

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## ANNOUNCEMENT

The American College of Surgeons will hold the seventeenth Clinical Congress in Detroit, Oc-

tober 3-7. Headquarters will be at the Book-Cadillac and Statler Hotels, and the meetings will be held at the Statler Hotel, and Orchestra Hall. The Hospital Standardization Conference will extend from Monday morning to Thursday afternoon and will include a discussion of hospital and nursing problems and hospital demonstrations. Monday evening's program will include an address of welcome by the local chairman, the address of the retiring president, the inaugural address of the new president, and the John B. Murphy oration. Clinics in general surgery will be held in the Detroit hospitals each morning from Tuesday to Friday, and in eye, ear, nose and throat work the same afternoons. Clinics will also be held at University Hospital, Ann Arbor, Tuesday to Thursday. On Tuesday and Wednesday mornings and afternoons, and on Thursday morning, clinical demonstrations will be held at the Statler Hotel (mornings) and Orchestra Hall (afternoons). On Thursday afternoon the annual meeting of the Governors and Fellows will be followed by a cancer symposium. On Friday afternoon there will be a symposium on traumatic surgery, to be participated in by leaders in industry, labor, indemnity organizations, and the medical profession. On Tuesday evening the program will take the form of a celebration of the Lister Centennial. On Thursday evening there will be a large Community Health Meeting in the Masonic Temple, and on Friday evening the Annual Convocation of the College. Other outstanding features will be the exhibits. In addition to the commercial exhibits there will be a replica of the Lister exhibit at the Wellcome Museum of Natural History, London, including Lister's operating rooms and hospital wards. The departments of hospital activities, of literary research, and of clinical research of the College will also present exhibits. Among the foreign guests will be Sir John Bland Sutton, England; J. M. Munro Kerr, Scotland; Gordon Craig, Australia; Gustaf E. Essen-Moller, Sweden; S. A. Gammeltoft, Denmark. The retiring president is W. W. Chipman, Montreal, and the president to be inaugurated, George David Stewart, New York. The Lister oration will be delivered by W. W. Keen, Philadelphia. The chairman of the Detroit committee on arrangements is Alexander W. Blain.

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**The R. I. Medico-Legal Society**—Last Thursday—January, April, June and October. Dr. Creighton W. Skelton, President; Dr. Jacob S. Kelley, Secretary-Treasurer.

## EDITORIALS

### THE STUDY OF PHYSICS IN PREPARATION FOR MEDICINE

At this season, editorial writers are accustomed to dwell on the advantage to the physician of some special branch of study. Mathematics, history and ancient languages are the subjects most often recommended. Ancient languages are constantly becoming of less importance in medical education. At present, the physician can obtain in a few hours

all the knowledge of ancient languages that is likely to be valuable or important in his work. History teaches the advantage of the use of reason over blind confidence in precedent or custom. It broadens vision and favors advancement. It is of particular value in the education of the medical mind. The study of mathematics is in itself of little advantage to the physician. Considered as the source of natural philosophy, mathematics is the foundation of medical science. Physiology rests on physical chemistry, this in turn, on natural philosophy, and natural philosophy, on the broad base of mathematics.



The importance to medicine and surgery of a comprehensive knowledge of physics can not be overestimated. The circulation of the blood, with the action of the cardiac pump, the movement of the blood stream through the arteries and veins and the various interchanges through the capillary walls, presents problems entirely physical. The respiration, with movements of the thorax and diaphragm, the diffusion of oxygen and carbon dioxide and the interchange of these gases between alveolar air and the pulmonary blood, depends on physical principles. The internist uses physical and mechanical instruments for diagnosis and the effects of light, heat and electricity in treatment. In the specialties, physics is of the greatest interest. The surgeon is constantly dealing with physical problems which are not fixed but are ever changing. A fundamental knowledge of physics is essential to his success. The work of the orthopedic surgeon depends almost entirely on physics. The action of healthy and diseased joints, the leverage of fractured or whole long bones and the mechanism of fixation are physical problems. The orthopedist constantly finds new problems which only an acquaintance with physics can enable him to rightly solve. The eye is an instrument for recording light vibrations. The ear intercepts the vibrations of the air which are recorded as sound. Refraction is a problem entirely physical. The middle ear, with its vibrating drum and chain of ossicles for transmitting the vibrations, is a beautiful machine, the action of which can be thoroughly comprehended only by one skilled in physics. The value of the physician in the community depends more upon his knowledge of physics than on any other branch of science.

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### STUDENT HEALTH

With the fall opening of schools and colleges it is appropriate for parents to consider health conditions in the institutions where their children are being trained. As far as the public schools are concerned health conditions in most communities may be said to be excellent. Careful inspection, prophylactic vaccinations, school doctors and nurses, the training of teachers and surroundings made hygienic by careful study on the part of the public authorities help to render the child's environment as safe as possible during school hours.

In boarding schools and the colleges the situation is quite different. Here the student is for long periods out of his home environment and a greater degree of responsibility for the safeguarding of his health rests upon the institution which is for the time being his home. In all matters of illness where quick decisions are necessary the school authorities of a boarding school stand in "loco parentis" and must act without delay. In such an institution a well equipped infirmary, a graduate nurse and the services of a well trained physician must be available. In other words the school must stand ready to furnish medical treatment for its scholars—subject of course to the direction of the parent when emergency conditions do not obtain.

The problem of student health at the college or university is a different one. Here we are dealing with young men or women approaching maturity and at an age when they are, or should be, to a great extent managing their own affairs. It is the duty of the college to furnish a healthy environment, to examine its students regularly to prevent their undertaking tasks or recreation for which they are not physically fit, to protect the healthy student by early detection and isolation of infectious diseases and to provide a means of caring for emergencies. It is also the duty of the college to present a certain amount of instruction to the student in matters of general and personal hygiene. It is much better, however, for the college authorities, not to take any responsibility for the furnishing of medical or surgical treatment to the students if the means of obtaining such treatment is available in the community. There is no more reason why a university should provide medical treatment than food or clothing, and the student should be left free to act independently in these matters though always able to obtain advice from the Medical Department of the university if he desires it. Every properly equipped college or university possesses a medical or health department whose duty it is to carry out the measures described above. The American Student Health Association is made up of representatives from the medical departments of more than a hundred colleges and universities throughout the country, has been functioning now for several years.

As a result of the activities of this organization much progress has been made in solving many of the problems which arise in this field. The net result of the whole development of college medical

departments is that the individual student is today many times safer in his undergraduate life than he was twenty years ago.

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### VACATION IMPRESSIONS

Presumably all wise physicians have taken a summer vacation. Some of us have in the past gone on the assumption that if we enjoyed our work we could work all the time and needed no vacation, but those of us in Rhode Island have seen some tragic examples of the fallacy of this idea, and know that a respite from our work and from contact with sick folks brings us back to our task better able to do good work. In addition to this general release from the pressure of work, we should on our vacation meet new friends, see new places and have some time for calm contemplation of a philosophy of life.

As one visits various parts of New England or neighboring states and countries, one finds the road filled with automobiles dashing here and there; some of these automobiles, to be sure, are going to camps and beaches where their occupants will settle down for real relaxation, but the general impression gained is that this age of hurry is leading people to dash madly about, boast of the miles covered and all the different places visited. On a trip to Maine, the writer left a town in northern Maine at the same time a buckboard drawn by two horses left; the automobile and the buckboard had the same destination; it took the automobile two and one-half hours to make the trip—it took the horses two and one-half days to make the same trip. One could not help but wonder whether the modern age, with its rapid transportation, with its running on schedule and its general wear and tear, did not involve certain dangers to our nervous systems, as well as our digestive systems, that made the older method of traveling have many compensations. As one got away from the beaten tracks into the heart of the woods and looked out upon mountains and lakes in their calm majesty, a certain restoration of viewpoint was gained, and the peace and quiet of nature seemed to allay the hurry and worry of our modern life. Would not the physician do well to teach his patients the value of simple things, the dangers of speed, and the wisdom of a close contact with nature. If we are to continue to add years

to the span of life, to gain a better sense of values and to maintain the best degree of health, isn't it time for us to align ourselves with the forces that teach a more sane living and an appreciation of the lessons provided all about us in the repose of mountains, lakes and rivers. Then, perhaps, we can do away with some of our sleeping potions, some of our digestive mixtures, and realize that we are surrounded with the healing forces of nature if we will only avail ourselves of them.

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### SOCIETIES

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#### THE RHODE ISLAND MEDICAL SOCIETY

The September meeting of the Rhode Island Medical Society was held September 1, 1927, at the Crawford Allen Branch of the Rhode Island Hospital, the Society being the guests of the Board of Trustees of the Rhode Island Hospital.

The meeting, with the President, Dr. Norman MacLeod, presiding, was opened at 12 o'clock by a demonstration of the methods of treatment of the inmates of the hospital by Dr. Roland Hammond of the orthopedic staff of the Rhode Island Hospital.

The President announced the following appointees to the New England Medical Council:

Dr. A. H. Harrington, for 1 year; Dr. Byron U. Richards, for 2 years; Dr. H. G. Partridge, for 3 years; and the President and Secretary ex-officio.

Dr. Peters, Superintendent of the Rhode Island Hospital, welcomed the members of the Society, and extended an invitation of a thorough inspection of the new hospital building.

The President announced that the New England Health Institute would hold its meeting at Providence, September 27th to 30th, and he urged as many members as possible to register for this meeting and to attend the sessions.

A vote of thanks was extended the Board of Trustees of the Rhode Island Hospital for the courtesy in inviting the Society to hold its meeting at the hospital.

Following the meeting, a clam bake was served in the shore pavilion.

Adjourned

J. W. LEECH, *Secretary*



### WOONSOCKET DISTRICT MEDICAL SOCIETY

The officers of the Woonsocket District Medical Society elected at our last meeting are as follows:

President, T. J. McLaughlin.

First Vice President, C. B. Barry.

Second Vice President, W. A. Bernard.

Treasurer, L. V. Conlon.

Secretary, W. A. King.

Counsellor, E. L. Myers.

Delegate, N. S. Garrison.

Board of Censors, T. S. Flynn, A. H. Monty, H. E. Gauthier.

WILLIAM A. KING, *Secretary*

## HOSPITALS

### THE MEMORIAL HOSPITAL

The following is a copy of the minutes of the Memorial Hospital staff meeting held September 1st:

"Meeting called to order at 9:00 P. M. by Dr. A. T. Jones, president pro tem., in the absence of President Dr. J. L. Wheaton. Record of attendance taken. Nine members present. Minutes of the previous meeting read and approved. It was voted to place in the records the committee appointed by Dr. Wheaton to attend Dr. Oulton's funeral and also the committee appointed to draw resolutions on his death.

"Committee to attend funeral: Drs. F. V. Hussey, G. B. McGraw, and H. B. Moore. Committee on Resolutions: Drs. A. T. Jones, E. A. Shaw and Wm. P. Davis.

"Flowers were sent to Dr. Oulton's funeral by the staff. Copy of resolutions on Dr. Oulton's death read and placed on file. Reports of various services read and cases discussed. Dr. J. L. Turner was elected treasurer of the staff to fill the unexpired term of Dr. Oulton. Meeting adjourned."

JOHN F. KENNEY  
*Secretary*

## BOOK REVIEWS

PRINCIPLES OF CHEMISTRY (Roe), C. V. Mosby & Co., publishers, covers a wide field in chemistry. The book treats in an elementary way of inorganic and organic chemistry, the chemistry of metabo-

lism and digestion, as well as vitamins and dietary requirements. Further there are exercises which furnish practical application. The book should appeal widely to the nursing profession.

### EXAMINATION OF CHILDREN BY CLINICAL AND LABORATORY METHODS, by Dr. Abraham Levinson.

This book on the examination of children by clinical and laboratory methods is a comprehensive study with lucid explanations of the various common procedures which the pediatrician employs. Also he has included most of the difficulties of examination, both clinical and laboratory, which are encountered in the practice of pediatrics as compared to similar situations and procedures encountered by general practitioners and diagnosticians.

It is an excellent book for the medical student during his instructions in pediatrics, and it is a handy book for the general practitioner or pediatrician to have in his office or laboratory to refresh his mind concerning the many laboratory tests.

INTERNATIONAL CLINICS, Volume III, Thirty-Sixth Series 1926. Philadelphia and London. J. B. Lippincott Company.

This volume contains a series of subjects dealing on, first, diagnoses and treatment; second, on neurology, psychiatry, and third, on surgery. Of practical importance to general practitioners is that on "Discharge Convulsions." Of considerable interest and speculation is that on radio-ionic medication of uranium.

The volume ends with notes on European medicine and medical education, with special reference to conditions existing in Italy, and with a brief but well written biography on Sir Clifford Ailbert by Sir Humphreys Rolleston.

INTERNATIONAL CLINICS, Volume I, Thirty-Seventh Series 1927. Philadelphia and London. J. B. Lippincott and Company.

This volume contains articles on diagnosis, treatment, medicine, surgery, bibliography, progress of medicine for 1926, and on cumulative index. Among the outstanding features of this volume are the clinics by Prof. Barker on diabetes mellitus, by Prof. Dean Lewis on surgery, by Prof. Sauerbruch of Germany on thoracoplasty and by Prof. W. Babcock on biliary surgery. The volume ends with an extensive treatise in the progress of medicine for 1926 by H. Cattell, M.D., and James Coupal, M.D.



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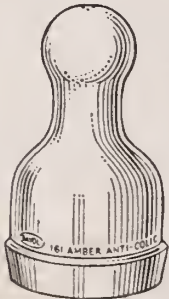
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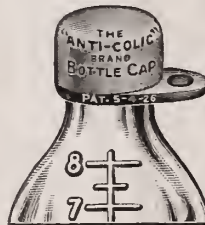


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# THE RHODE ISLAND MEDICAL JOURNAL



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## ORIGINAL ARTICLES

### THE TREATMENT OF EPILEPSY OF CHILDHOOD BY THE KETOGENIC DIET.

FRITZ B. TALBOT, M.D.

BOSTON, MASS.

**INTRODUCTION.** Epilepsy has been known for many centuries, and has counted among its victims several of the famous characters in history. It is one of the conditions which is not fully understood, and, as a consequence, no specific treatment has been developed for the group of symptoms which bears its name. Numerous widely varying types of cures have been advocated, praised, and eventually discarded. Surgery has given relief in some instances, but drugs and various forms of diet have been the main form of therapy used in most instances. The greatest success has been claimed for luminal, which has largely displaced the bromides. The interest in the low-protein diet and salt-free diets has diminished, and although the various methods of treatment have all been attended with some measure of success, the proportion of failures have been so great that any treatment which gives better results is welcome.

The latest and most promising method of treatment is by means of what is known as the ketogenic diet, which causes the formation of acetone and other ketones. It is the object of this paper to describe this diet in detail, but before taking it up, fasting and its relation to the diet will be mentioned briefly. Fasting in the treatment of epilepsy is mentioned in the Bible, Mark IX, 17-29. An epileptic boy was brought to Christ, who cast out the evil spirit which was tormenting him. When asked by his disciples why they had been unable to do the same thing, Christ said, "This kind can come forth by nothing but prayer and

fasting." Twenty-four children underwent various periods of fasts in the Children's Clinic of the Massachusetts General Hospital with relief of symptoms during the fast,<sup>1</sup> but in all cases the administration of food was followed by a return of the attacks within a few days or weeks. The ketogenic diet was then instituted, and it was found that the same chemical changes took place in the body as did during fast. The most striking changes were a lowered blood sugar, a moderate ketosis-acidosis as shown by a large amount of acetone in the blood, breath, and urine, and a slightly lowered carbone-dioxide combining power of the blood.<sup>2</sup> It was thought that the clinical improvement was due to some of these chemical changes. Although it is not clear which factor is responsible for this, it is possible that the anaesthetic action of acetone may be the cause of the improvement.

Body heat and energy are obtained by the oxidation of fat, carbohydrate, and protein. Carbohydrate is necessary for the complete oxidation of fat, and if sugar is not present in sufficient amounts, the metabolism of fat only progresses to the stage of ketones. So far as we are concerned, this happens during fasting when the carbohydrate reserve of the body is used up, and on the ketogenic diet when the carbohydrate in the food is so reduced and the fat increased that there is not enough carbohydrate to burn up the fat. The antiketogenic element is found principally in carbohydrate and the ketogenic element is mainly in fat. So long as the proportion of ketogenic food as compared to the antiketogenic food is less than  $1\frac{1}{2}:1$  a ketosis will not develop, but when it is 2 or more to 1 a ketosis is to be expected. The ketogenic diets are estimated in amounts of the different foods by weight. The methods used by us are similar to those used by Wilder, Helmholz, and Peterman.<sup>3</sup>

**THE RESULTS OF THIS METHOD OF TREATMENT.** Of the cases treated in the Children's Clinic of the Massachusetts General Hospital, the Mayo Clinic, and a few in private practice, a total of about 200 children, complete symptomatic re-

\*Read before the Rhode Island Medical Society at the Annual Meeting, June 2d, 1927.

lief has been obtained in 33 per cent., while definite improvement has been observed in one-half to three-quarters of those who followed the diet consistently.

At first it was thought that improvement could only be expected in so-called idiopathic epilepsy, but it has also been obtained in children with definite pathology of the brain, such as cerebral palsy and encephalitis. The cases in which there is complete relief of symptoms are about equally divided between those suffering with grand mal and those with petit mal.

The age of the patient seems to have a definite relation to the proportion of so-called cures. Dr. Luther has divided the cases at the Massachusetts General Hospital according to age, and has found that treatment is most effective when started in children before puberty, and that a greater proportion of failures occurred in subjects in whom treatment was started later. No statistics are available as to the proportion of "cures" that are to be expected in the adult, but a few cases have been said to have completely been relieved.

It is difficult to say what should be included as cure. Some cases are free so long as they abstain from carbohydrate, but have attacks whenever they break the diet. An example of this is a boy of the Massachusetts General Hospital group who had been free from attacks for fifteen months. He then ate considerable amounts of candy, and the attacks returned. They were quickly relieved by returning to a strict diet. Such cases apparently can be kept free from attacks so long as they refrain from extra carbohydrate. Many cases have now been entirely free from attacks for several months. The longest freedom is in a case of Helmholz's which has had no attack for three years and ten months.

**THE DIET.** Fat is roughly 100 per cent. ketogenic, carbohydrate 100 per cent. antiketogenic, and protein is about half and half. The foods are figured in grams of cooked food and weighed out on scales just as they are in the treatment of diabetes. The proportions of ketogenic to the antiketogenic foods of the usual normal diet are about 1:4.<sup>4</sup> The patient is first put on a 1½:1 diet, which is a marked increase in fat and decrease in carbohydrate. The proportions are such, however, that the ketones, acetone, B-oxybutyric acid and diacetic acid should not appear in the urine.

This diet may be given for ten days to two weeks until the body adjusts itself to the unusual amount of fat and the diminished carbohydrate. The proportions are then changed to 2:1. The sodium nitroprusside test for the ketone bodies appears in the urine, but the burgundy red color of the ferric chloride test is negative until the proportions of the diet are increased to 2½:1. This and subsequent changes to 3:1, 3½:1 and even 4:1 are made at one to two week intervals. The tests of the urine give checks of how well the diet is being followed. In nearly all instances it is necessary to increase the diet to the proportions of 4:1 before the symptoms completely disappear. This can usually be done in two months time. The patient is kept on the diet until he is free from symptoms for six months. The diet is then gradually relaxed by increasing the carbohydrate ten grams at a time and reducing the fat in corresponding amounts so that the total food intake contains the same number of calories. These changes are made until the child is on a normal diet with a limited amount of carbohydrate. Candy and other sweets must always be excluded from the final diet.

In some stubborn cases, a short period of carefully controlled fast is also employed to reinforce the effects of diet, but such a procedure is not desirable in the majority of cases. It should be avoided when possible.

In the preparation of the diet, certain needs must be supplied in order to keep the child healthy. The total amount of food given must be enough both to prevent loss of weight and allow for normal growth. Since growth is continuous during childhood, the amount of food will have to be increased every few months. The minimum caloric requirements can be estimated by adding 50 per cent. to the basal metabolism<sup>5</sup> for the expected weight, but it is often necessary to give more to active children.<sup>6</sup> The protein must also be supplied in amounts that will allow for repair and growth. In the majority of instances, the requirements will be fulfilled if one gram of protein is given for every kilogram of the expected body weight (weight for the height). The patient should be weighed at least once a week to be sure that he is not losing weight for lack of food. If he loses below the average weight for his height, more



calories must be given until normal rate of growth has again commenced.

Twenty-four hour amounts of urine should be examined at intervals and the protein (nitrogen) excretion from the body quantitated. A negative balance takes place when more protein is excreted than is taken in the food. If this should happen over a long period, the health would eventually suffer. In most instances, however, the amount of protein recommended is sufficient to prevent this. All my cases except one have had protein retention.

The fat and carbohydrate content of the diet can then be calculated from the following formula:

Total Calories = 9 × R (C + P) + 4C + 4P.

The following example shows the type of diet given to a girl nine years old, 51 inches tall, weighing 61½ pounds (28 kilograms). The minimum total caloric needs were 1600 calories. She was given slightly more than one gram of protein per kilogram of weight, as she was growing rapidly. The first diet, the proportions of which were 1½ grams of ketogenic food to 1 gram of antiketogenic food, contained carbohydrate 60 grams, fat 137 grams, and protein 31 grams. The diet list given to the patient to follow is shown as follows:

During two months she was worked up to a 4:1 diet, which contained carbohydrate 9 grams, fat 160 grams and protein 31 grams. A copy of this diet is shown as follows:

Diet 4:1:

Carbohydrate, 9 grams.  
Protein, 31 grams.  
Fat, 160 grams.  
Calories, 1600.

Breakfast	C	P	F	Total Calories
1 egg .....	...	6.	6.	78.
30 grams 40% cream...	1.	1.	12.	116.
10 " bacon .....	...	1.6	5.	51.
60 " grapefruit ...	2.	1.	...	12.
36 " butter .....	...	...	30.	270.
Bran cakes .....	...	...	...	...
Cocoa shells .....	...	...	...	...
	3.	9.6	53.	527.

Dinner

Broth .....	...	...	...	...
30 grams lean meat....	...	8.	5.	77.
60 " 5% vegetables	2.	1.	...	12.
30 " 40% cream ..	1.	1.	12.	116.
32 " butter .....	...	...	26.6	240.
10 " olive oil .....	...	...	10.	90.
D-Zerta .....	...	...	...	...
	6.	19.6	106.6	1062.

Supper

Broth .....	...	...	...	...
60 grams 5% vegetables	2.	1.	...	12.
30 " 40% cream ..	1.	1.	12.	116.
34 " cheese .....	...	9.	12.4	148.
35 " butter .....	...	...	29.1	262.
	9.	30.6	160.1	1600.

Diet 1½:1:

Carbohydrate, 60 grams.  
Protein, 31 grams.  
Fat, 137 grams.  
Calories, 1600.

Breakfast	C	P	F	Total Calories
15 grams Cornflakes....	11.8	1.1	...	52.
20 " bacon .....	...	3.3	10.	105.
60 " 40% cream ..	2.	2.	24.	232.
180 " grapefruit or	...	...	...	...
90 " 10% fruit ...	6.	3.	...	36.
15 " butter .....	...	...	12.5	112.
Bran cakes .....	...	...	...	...
Cocoa shells .....	...	...	...	...
	19.8	9.4	46.5	537.

Dinner

Broth .....	...	...	...	...
18 grams lean meat....	...	4.8	3.	46.
120 " 5% vegetables	4.	2.	...	24.
60 " 40% cream ..	2.	2.	24.	232.
120 " grapefruit or	...	...	...	...
60 " 10% fruit ...	4.	2.	...	24.
22 " butter .....	...	...	18.3	165.
2 Unedas .....	10.	1.	1.	53.
D-Zerta .....	...	...	...	...
	39.8	21.2	92.8	1081.

Supper

Broth .....	...	...	...	...
120 grams 5% vegetables	4.	2.	...	24.
60 " 40% cream ..	2.	2.	24.	232.
15 " cheese .....	...	4.	5.5	65.
16 " butter .....	...	...	13.3	120.
3 Unedas .....	15.	1.5	1.5	78.
	60.8	30.7	137.1	1600.

A knowledge of dietetics is necessary to carry the diets out successfully. The food must be so proportioned at each meal so that the ketogenic-antiketogenic ratio is the same throughout the day. Each patient must understand that it is essential to eat all the food prescribed at every meal, otherwise the ratio will be upset. Substitutions of food should not be allowed unless specifically stated, because only foods with exact equivalent compositions can be used. The diabetic scales are an essential part of the equipment. All food should be weighed out accurately, according to the prescription.

The diets should not be changed too rapidly, because the large amount of fat will upset the digestion if sufficient time is not given for adjustment. The general health of most of the patients on the diet improves. Sallow, muddy complex-

ions, even those with acne, have cleared up. In some instances constipation is relieved and two or three natural movements are passed daily. In others constipation requires treatment. The excess of fat has been well tolerated, even in patients who were said to be unable to take fat. In practically no instances has it caused any digestive symptoms, except when the diet is changed too rapidly. In one or two instances there has been one day of nausea during the period of adjustment, but in no case was it necessary to stop the diet or give any special treatment.

Constipation, if present, should be treated with laxatives that are free from sugar. The following is a list of those which may be used:

- (1) Plain granular agar-agar.
- (2) Various Mineral Oils.
- (3) Diabetic or Plain Petrolagar.
- (4) Salts (Carlsbad or Epsom).
- (5) Bitter fluid extract of Cascara.

Some cases do better if a dose of salts is given regularly once a week, while others seemed to be harmed by this procedure.

Fatigue, worry, and mental irritation should be avoided. The best results are obtained when these are eliminated. One hour rest should be taken daily.

Since milk, one of the main sources of calcium, is nearly eliminated from the diet, and since calcium excretion is increased during an acidosis, it is well to supplement the food calcium by calcium in some other form. Our routine is to give two to three teaspoons of calcium lactate daily with the meals. It is very soluble in water and may be so given, or it can be mixed with the food. Copious water drinking is desirable to ensure free elimination. A minimum of six to eight glasses of water should be drunk daily.

Although only a limited amount of table salt is allowed on the food, no restrictions are placed on its use in cooking. It has not had any harmful effect on the action of the diet, and has made the food much more palatable.

Luminal and bromides are not necessary when the diet acts successfully, and are always omitted in children. Adults are allowed to continue their use as they feel the need of them, but are encouraged to gradually reduce the dose until they feel

it can be omitted. Neither drug has any beneficial effect on the diet.

**SUMMARY.** The ketogenic diet results in complete symptomatic relief of the epileptiform symptoms in at least 33 per cent. of children, and it is followed by definite improvement in nearly three-quarters of the cases. Results are equally good in petit mal and grand mal. They are less satisfactory in the adult than in the child.

The preparation and use of the diet requires a technique and precautions similar to those used in the dietetic treatment of diabetes. The accuracy with which it is followed can be checked up by tests for acetone in the urine.

The diet must be increased up to a ratio of 4 (ketogenic):1 (antiketogenic) in the majority of cases before the best results are obtained. This is followed by a very marked ketosis. After freedom from attacks for six months, the amount of carbohydrate is gradually increased and the fat decreased until in the case of the girl shown above a diet containing 100 to 150 grams of carbohydrate is allowed. In no case should candy or other sweets be given. Excessive amounts of sweets are followed by attacks.

---

<sup>1</sup>Hoeffel, G., and Moriarty, M. E.: "The Effects of Fasting on the Metabolism of Epileptic Children." *Am. Jour. Dis. Child.*, 28:16, (July) 1924, and Shaw, E. B., and Moriarty, M. E.: "Hypoglycemia and Acidosis in Fasting Children with Idiopathic Epilepsy." *Am. Jour. Dis. Child.*, 28:583, (Nov.) 1924.

<sup>2</sup>Talbot, F. B., Metcalf, K. M., and Moriarty M. E.: *Am. Jour. Dis. Child.*, 33:218, 1927, and *Boston Med. and Surg. Jour.*, 196:89, 1927.

<sup>3</sup>Wilder: "The Effect of Ketonuria on the Course of Epilepsy," *Mayo Clinic Bull.*, 1921, p. 307. Peterman: *Am. Jour. Dis. Child.*, 28:28, 1924. Helmholz: *Am. Pediatric Soc. Trans.*, (May) 1927 (unpublished).

<sup>4</sup>On a 1600 caloric diet, this would be carbohydrate 184, protein 31, fat 62 grams; 1½:1 diet, carbohydrate 61, protein 31, fat 137 grams.

<sup>5</sup>Talbot, F. B.: *Physiol. Reviews*, (Oct.) 1925.

<sup>6</sup>The weight used in these calculations is the average weight for the height.

<sup>7</sup>The method used in calculation can be found in Talbot, Metcalf and Moriarty—*Boston Medical and Surgical Journal* 196, Jan. 20, 1927. Luther: *The Modern Hospital*, May, 1927. A very simple practical calculation table giving diets containing 1000 to 2500 calories has been devised by Drs. Luther and Bartlett and printed by the Massachusetts General Hospital.



### III CASES OF CANCER OF CERVIX TREATED WITH RADIUM.

CASE NO.	LESS THAN 1YR	1YR	1¼	1½	1¾	2 yrs	2¼	2½	2¾	3 yrs	3¼	3½	3¾	4 yrs	4¼	4½	4¾	5 yrs	Over 5 yrs.	NOTES
1						x													8¼ Years	Died Uraemia No Cancer
2																				
3														o						No Cancer
4	Lost									x										Died Uraemia No Cancer
5						x														
6						x														
7						x														
8	x																			
9				x																
10														o						No Cancer
11			x																	
12	x																			
13																x				
14												x								
15		x																		
16	Lost																			
17										x										
18		x																		
19					x															
20		x																		
21																				
22	x													o						No Cancer
23																				
24										o										No Cancer
25										o										No Cancer
26														o						Cancer Probably Present
27	x																			No Cancer
28										x										
29										o										No Cancer
30										o										No Cancer
31																o				No Cancer
32	x																			
33	x																			
34	x																			
35										o										No Cancer
36		x																		
37										o										No Cancer
38	x																			
39	x																			
40									x											
41	x																			
42												o								Cancer Present
43	Lost																			
44				x																
45		x																		
46					x															
47	x																			
48	x																			
49				x																
50	x																			
51	x																			
52	x																			
53	x																			
54	x																			
55													o							No Cancer
56	x																			
57													o							No Cancer
58	x																			
59	x																			
60	x																			
61	x																			
62	x																			
63										o										No Cancer
64	x	NO TREATMENT																		
65	x																			
66		x																		
67			x																	
68	x																			
69	x																			
70	x																			
71										o										Cancer Present
72	x																			
73	x	RESULT OF RADIUM																		
74		x																		
75		x	CA FUNDUS	STUMP TREATED WITH RADIUM																
76	x	NO TREATMENT																		
77										o										No Cancer
78				x																
79	x																			



# 79 CASES OF CANCER OF CERVIX TREATED BY OPERATION.

	OPERATIVE DEATHS	LIVED LESS THAN 1 YR.	1 YR.	1-2 YRS.	2-3 YRS.	3-4 YRS.	4-5 YRS.	Over 5 Yrs.	NOTES
1	X								
2	Lost								
3									
4	Lost							O	Recurance Death after 8 Years
5	X								
6								O	Well 16 Years
7			X						
8	X								
9								O	Died of Shock after 12 Yrs.
10								O	Well 11 Yrs.
11	Lost								
12	X								
13			X						
14						X			
15	Lost								
16		X							
17		X							
18			X						
19	Lost								
20		X							
21		X							
22								O	well 16 Yrs.
23								O	Died CA of SIGMOID after 15 Yrs.
24			X						
25	X								
26									
27	Lost			X					
28								O	Well 14 Yrs.
29	Lost								
30	Lost								
31	Lost								
32	Lost								
33	Lost								
34	X								
35	X								
36					X				
37	X								
38								O	Well 12 Yrs.
39								O	Well 12 Yrs.
40	Lost								
41						X			
42								O	Well 11 Yrs.
43	X								
44			X						
45	X								
46	Lost								
47	Lost								
48	Lost								
49		X							
50	X								
51	Lost								
52	Lost								
53								O	well 9 Yrs.
54		X						O	Christian Scientist
55									
56		X							
57	X								
58	Lost								
59	Lost								
60		X							
61	Lost								
62								O	Well 7 Yrs.
63								O	
64								O	Well 7 Yrs.
65				X					
66								O	Well 7 Yrs.
67					X				
68	X								
69				X					
70								O	Well 7 Yrs.
71								O	Well 7 Yrs.
72								O	Well 6 1/2 Yrs.
73	X								
74					X				Died Nephritic Abscess No Cancer
75	X								
76	Lost								
77		X							
78	X								
79							O		

16 DIED FROM OPERATION

21 LOST TRACK OF

14 DIED IN 1 YEAR OR LESS

19 LIVED FROM 5 TO 16 YRS. FREE OF DISEASE

1 HAS LIVED OVER 4 YEARS FREE OF DISEASE

## CANCER OF THE CERVIX\*

HERMAN C. PITTS, M.D.

Cancer of the uterus is one of the most frequent forms of cancer. It comprises about 15% of all cancers, and in women constitutes some 30%. Cancer of the cervix is the most frequent type of cancer of the uterus, and occurs in 90% of cases. The fact that the majority of women have had one or more pregnancies perhaps determines the greater frequency of cancer of the cervix. At any rate, it is perfectly evident that it occurs most often in parous women and that neglected lacerations and chronic cervicitis generally precede the development of cancer.

The growth shows itself in two forms, the squamous celled and the adeno-carcinoma, determined by the site of origin. The cervical canal to the external os is lined with columnar epithelium. There are many glands lined with the same type of epithelium running deep into the tissues. Cancer starting anywhere in this gland area, is of the adeno-carcinoma variety. On the other hand, the vaginal portion of the cervix is covered with stratified epithelium, and cancer beginning there is of the squamous celled type. The age incidence is the usual one for all types of cancer. That is, it appears most often in the latter half of life when the tissues are all undergoing degenerative changes. The large majority of our cases are between 40 and 60 years old. The youngest case was 22.

The experience of many men has shown that cancer in women under 30, tends to recur very promptly. Surgery is of little benefit. The growth recurred in a woman of 28, after the most thorough type of operation, before she could leave the Hospital. Dr. John G. Clark of Philadelphia told me of a similar case in his own practice and vowed he would never again attempt surgery for cancer of the cervix in a young woman.

The early symptoms of cancer of the cervix are so well known they hardly need be mentioned. I said, "symptoms"; I might say, "symptom," for there is really one and only one symptom of any moment in the early stages, and that is irregular bleeding. The bleeding may be slight, so very slight as to be nearly overlooked. It may follow

coitus or straining at stool or any unusual exertion. The fact that this bleeding does occur is the important thing and its occurrence demands an immediate, thorough examination. Every single member of the medical profession in Rhode Island must know these things, and yet you would be surprised, I am, by the number of patients presenting just such symptoms who are tolled along with promises and pills for weeks and months without even being examined by the men to whom they trust their lives. Laziness or indifference, I am not sure which it is, perhaps more of the former than the latter. I do know, however, that the medical profession at large has a responsibility to these patients that is not being met. Sometimes I think the American Society for the Control of Cancer had best spend its energies on the Doctors and let the public alone! That doesn't mean that the public also is not responsible for our failure to get cases early. Their failure is due to pure ignorance. And the most grievous ignorance lies in the belief that every woman must bleed irregularly and profusely at the time of the menopause. If we could only uproot that belief; if we could only educate all women to realize that irregular or profuse bleeding at any time is a danger signal, we would have accomplished much toward alleviating the suffering from cancer of the uterus.

The growth in the cervix shows itself in two quite distinct forms: either as an ulceration or a proliferation. The ulcerating type begins as a hard nodule that later breaks down, or as a small ulcer that gradually extends until the whole cervix is replaced by an extensive crater with hard edges and a friable sloughing surface that gives off a foul discharge and bleeds profusely on touch. The proliferating type shows itself first as a budding out of mucous membrane into a sort of polyp. This gradually enlarges until the whole upper vagina may be filled with a friable cauliflower-like mass that also bleeds profusely and gives off a bloody, foul discharge.

Extension of cancer of the cervix is in one of two ways—either by direct invasion of the parametrium or by way of the lymphatics to glands near the uterine vessels or at the bifurcation of the common iliacs. Obviously, cancer arising in the cervical canal will invade the parametrium rather quickly, while on the other hand, the proliferating, cauliflower type travels in that way

\*Read before the Rhode Island Medical Society March 3rd, 1927.



much more slowly and, as we have found, is much more amenable to treatment. On the other hand, I am quite certain the ulcerating squamous celled type metastasises to the pelvic glands quickly and is not so often cured even when the local result of treatment is perfect. Let it be understood that I use the term "cured" advisedly; we never really consider a cancer patient cured. We can truthfully say they are well for 5 years or more, perhaps, but being cured is a different thing and until we know more of what cancer is, and of what its cure involves, we are not justified in using the term.

I might say here what I have to say as to the nature of cancer. If we consider cancer an entirely local disease, then cancer of the cervix is one of its most favorable forms to treat. Remove the local disease by any means one sees fit and the disease is really and truly cured. This we know is not easily accomplished, even in the very earliest case. That cancer is a local disease appears to me from observation and experience in treating it, entirely illogical. I am much more willing to consider it a local expression of some constitutional fault. Just what that fault is, remains to be discovered. Until that happy day comes it must be our endeavor to get cases early and to eradicate the local disease in the most thorough manner possible.

The methods in use for accomplishing this have been various. Some 50 years ago, Dr. Byrne of Brooklyn used the actual cautery. By carefully coning out the cervix, he was so far successful that he was able to report a fair series of so-called cures. In our own day, Percy has used long applications of less extreme heat in an effort to kill the more vulnerable cancer cells and leave the healthy tissue undamaged. Although in his hands the results were encouraging, other men who have tried the method have given it up as unsatisfactory. Operative methods have been and still are extremely popular. Vaginal hysterectomy is perhaps the safest even yet, and for many years while abdominal technique was being perfected, it certainly was. Not that it ever was or ever can be made the most satisfactory from the point of view of "cures," and still a certain number who are so operated upon remain well for years. As can be seen very readily, the growth must be attacked in its very earliest stages to make vaginal hysterectomy possible at all.

In an effort to increase the scope of operation in cancer of the cervix, Wertheim of Vienna, devised and practiced one that was extremely radical and thorough. Through the abdomen, the uterus, tubes and ovaries, all the parametrium, and as much of the vagina as possible were removed. He, at first, advised dissecting out the gland areas lying at the bifurcation of the iliac vessels, but later gave this up as being too hazardous. To accomplish this wide removal, he dissected the ureters free on each side throughout their course in the pelvis. The operation is difficult, primary mortality is high, and complications following it, numerous. Certainly it should not be attempted by one not thoroughly practiced in pelvic surgery. On the other hand, no other single operative procedure gives as large a percentage of five year "cures."

Coming now to the latest of practical methods of treatment, we have Radium, seconded by X-ray. It is not known why Radium and X-ray act on cancer tissue as they do. We do know that these agents affect different growths very differently. Some are much more resistant than others. Only recently a man who is in a position to know, gave it as his opinion that the more cellular and consequently more malignant growths, were much more successfully treated by radiation than by operation; operation in most of them being followed by prompt recurrence.

The method of application of radium is the important thing. And the most important thing in that, is not to over treat. Overtreating is sure to be followed by a tremendous breaking down of tissue with the formation of an extensive crater. This crater is slow to heal and its infected, sloughing walls are ideal for the production of what is probably an entirely new cancer.

Every clinic develops its own technique. Ours is as follows: Platinum needles of varying lengths and containing 2 or 3 mgms. of Radium, are inserted into the growth in the cervix or into the parametrium, when the growth has extended that far, and are allowed to remain in place from 72 to 96 hours. In addition we are apt to place 100 mgm. filtered by silver, brass and rubber, in the cervical canal for from 12 to 15 hours. The advantage of the platinum lies in the fact, that it stops or filters out the beta or burning rays and allows only the hard gamma rays to enter the tissues. On that account, even after a four day ap-



plication, the tissues show no necrosis and there is no breaking down as there would be if steel needles for instance, were left so long. Generally in two weeks after treatment the cervical tissues look nearly normal. If we see a continued, marked improvement, we do not treat again and are content with a thorough application of heavy X-ray front and back. If on the other hand, the disease is evidently not eradicated, we repeat, being careful not to overdo at this second treatment.

Treatment of cancer of the cervix by any means at our command today, is unsatisfactory and discouraging. We have many, many days when we feel our efforts are wasted. Then, perhaps, several patients come back after several years of excellent health, and we are distinctly encouraged by feeling that at least, some out of the many have been helped.

During these years we have used Radium, we have been looking for some agent that injected into the patient's body, will increase the action of Radium and X-ray. So far, we have tried many things without result. Whether we are justified in our hope that such an agent can be found is perhaps doubtful. Nevertheless, we must keep on, looking forward to the day of accomplishment.

#### NOTE

The accompanying charts show, first a comparison of results between operation and treatment of cancer of the cervix with Radium and, second give a more or less graphic picture of what we have been able to do for the first 111 cases coming to the Cancer Clinic. We have included in this series, three cases of cancer of the body of the uterus where, for some reason, a complete hysterectomy was not done, and where a heavy dose of Radium was given in the stump of the cervix immediately after the supra-cervical operation. Two of these cases have remained well, while a third died from extension to the iliac glands with no demonstrable growth in the cervix.

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#### PRENATAL PROBLEMS\*

By PAUL APPLETON, M.D.

PROVIDENCE, R. I.

Prenatal care is not a new subject, but it is an all important one. For the serious obstetrician, the care and observation of the patient during

pregnancy is a compelling obligation, and while less spectacular, full as necessary and important as delivery.

The mortality of obstetrics is not decreasing. This is a startling but established fact, resulting from searching investigation by governmental commission and the appointed committees of Medical Societies. The conclusions of these agencies unanimously agree that the only way to decrease this mortality is by better, more careful, and especially by universally practiced prenatal care. The public is rapidly absorbing the educational propaganda of good medical thought and is responding with more enthusiasm than we might expect in their demand for better and safer obstetric practices.

The bulk of the responsibility must therefore be laid directly upon the Medical Profession. It is unfortunate that there are still a tremendous number of practitioners who, doing a considerable amount of obstetrics, make no pretense of prenatal care. This is either from ignorance or carelessness or both. We have repeatedly taken care of patients, who at a previous confinement were in supposedly competent hands and yet have had little or no study during pregnancy. Even blood pressure readings are a new experience for them and pelvic measurement unheard of.

These considerations, based on fact, lead me to again bring this important subject to your attention and to emphasize our responsibility for careful painstaking and thoughtful study of the prospective mothers under our care.

My paper will not discuss much of the usual routine procedure of pregnancy care. I came before this society with a previous paper on this subject. But today I would like to call your attention to some of the interesting side lights and unusual phases.

First, let us consider the mental side of the patient. She comes to us not as a test tube to a laboratory, but as an individual. She must be guided and treated as an individual and not as a hypothetical case. She has some real misinformation. She has many questions uncertain in her mind. She has fear. These matters must be sought out and cleared up,—all of which takes

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\*Read before the Rhode Island Medical Society at the Annual Meeting, June 2nd, 1927, and supplemented by motion pictures by the author.

time and unceasing patience. It is well worth it, and will help tremendously in our management of the case.

Get interested in the patients life, her medical and social history, her ambitions, her ideals, and her attitude towards prospective motherhood. Emphasize her loyalties. Minimize her distrusts. Take away her burdens of worry and anxiety, and imbue her with optimism. She cares little for the diplomas on your wall. She knows little of your training, but she absorbs your personality, your sympathy and your kindly guidance. She can be led into an attitude of co-operative effort and her entire pregnancy and labor too, will be colored by this mental state. I know of no human experience where the doctrine of psycho-physical parallelism is more aptly demonstrated. One must of course be guarded in prognosis and one must interpret physical signs truthfully, but one may and should minimize groundless fears.

One of the difficulties in handling these patients is the bridge-table advice that she gets from her neighbor. There are as many modern popular notions as there are old wives tales, less superstitious in character but just as depressing to the introspective patient, and let me emphasize, that pregnant women are more introspective than they will ever reveal. Search out these mental neoplasms that are causing anguish to the worrisome patient and extirpate them with a well chosen word of scientific fact to disprove, or radiate them with emanations of optimism. Patients may forget our skill, but they do not forget the milk of human kindness.

In advising the patient, positive suggestion is far more effective than negative command. "You may do the ordinary things of life always with temperance and common sense" is a better way of advising than to say "You must not do this and you must not do that." Do not make an invalid out of your patient unnecessarily by limiting too much her usual mode of living, her habits, her diet, and exercise or by proscribing normal work and normal recreation.

Concerning her habits, they deserve some attention. I do not regard cigarette smoking as a pretty attribute to the expectant mother, but I do not forbid it. The Pediatricists suggest that it limits the future nursing ability and that opinion warrants advising the patient to limit the habit.

In these arid days when alcoholic sources of supply are unreliable, I believe that the cocktail habit is potentially dangerous, and the patient should be warned not so much against the cocktail as its ingredients. Radiance to add to the joy of living should be obtained otherwise.

I firmly believe, that present modes of dress among our patients are a tremendous advance in the hygiene of pregnancy. Pelves are no longer deformed by tight corsets, and a superabundance of petticoats no longer constricts the growing foetus. Our patients reach the childbearing period better able to perform their physiological function. I no longer advise patients for or against the maternity corset. The woman used to corsets will be more comfortable with one, but her sister unused to such restraint will be as comfortable without. A supporting binder or girdle will often produce some comfort.

There seems to be a widespread opinion both medical and popular, that high heeled shoes are in some way detrimental to the health of women. No less an authority, than the late Doctor Robert W. Lovett, the eminent Orthopedic Surgeon of Boston is my reason for advocating the high heeled shoe in pregnancy. By tending to throw the patient forward thereby changing her centre of gravity, she is forced to stand and walk more erectly, throwing back her shoulders and preventing round shoulders and other postural spinal curvatures. This tends to prevent tilting of the pelvis and favors the gravitation of the presenting part to enter the patient's pelvis. These shoes also give better support to the arches of the foot, already overtaxed by the increasing weight of the patient. I commend this matter to your attention.

Dietary restriction is ill advised in early pregnancy. The patient is usually very hungry and often has unusual food desires and appetites. I believe in a full free diet, and in satisfying those naive cravings so often manifested, on the basis that they represent a metabolic demand of one kind or another, too complicated often for the physiological chemist to interpret. Later in pregnancy, perhaps the last three months, kidney irritants are to be restricted lest the overloaded renal system rebel, and toxemia supervene. Again while there is little experimental evidence, in spite of much research on the matter from all angles,



I cannot help feeling that clinical experience warrants the assertion that a restricted diet does have some effect in keeping down the weight of the child. This I feel is important. When we congratulate a mother upon the birth of a child weighing over nine pounds, we are in reality congratulating her upon certain, though not always evident, maternal damage.

History taking is important, and care is essential. Detail to the point of exhaustion is ill advised. No patient is impressed by the game of "Ask me another" in your office. It takes but a short time to get a skeleton history of the pertinent features bearing upon the problem of childbirth. The story of previous pregnancies, labors and puerperia is important as is that of gynecological experiences and trauma resulting in possible pelvic deformities.

It is fair to state that the average patient is a well woman and considers herself so. The majority will say that "They never felt as well before." That is the normal. But grading all the way from this to comparative invalidism are train upon train of symptoms. Some important, some trivial. We must analyze these and treat them appropriately. I would like to speak of a few definite symptoms.

Fatigue is so constant in early pregnancy that I consider it almost as pathognomonic. In over a hundred consecutive cases in private practice extreme fatigue and lassitude in the first twelve weeks of pregnancy was a constant symptom and so noticeable to the patient that she volunteered the information, although the question was studiously avoided. I regard it as the first subjective symptom of pregnancy,—more constant than breast or bladder symptoms. I have many times made a tentative diagnosis of pregnancy on this sign of lassitude alone, without any supporting evidence and in every case even in those illegitimately pregnant, subsequent events have confirmed the diagnosis. It is often strikingly observed before a menstrual period has been missed. It is a very reliable diagnostic point.

Psychic disturbance is to some degree always present in pregnancy. Not always a depression. Sometimes a definite euphoria. It is so well known that it deserves little comment save this interest-

ing observation, that almost all psychic disturbance fades away gradually during the last three or four weeks, so that even minute evidences of psychic disturbance are absent at term. A psychosis that is present when the patient reaches term is to me an ominous sign and the patient will bear watching after delivery lest she develop a true puerperal insanity.

The cardinal signs of pre-eclamptic toxemia are well known. Albuminuria, hypertension, headache, nausea, oedema, epigastric pain, and retinitis with choked disc. Many cases show only a few of these signs, and any one of them is significant and should not be overlooked. Toxemia going on to eclampsia may occur with an essentially normal urine. Of course it is rare, but dependence upon urinalysis alone is a dangerous practice.

There are innumerable other symptoms which though laboratory proof is absent, must be regarded as toxemic in origin, and of great or little importance in direct proportion to the presence or absence of other cardinal signs.

Some of these symptoms not necessarily of dangerous prognostic import, are nevertheless extremely difficult to treat. In any case an anti-toxemia regime should always be instituted. Prominent among these are the various skin rashes, most atypical from the ordinary rashes of Dermatology. They may be on any part of the body and vary from hyperemias to true hyperplasias. Some are progressive. Some are evanescent with remissions and recrudescences. None are permanent but will clear up shortly after delivery. The itching is sometimes terrific from these lesions and should be treated actively.

Gingivitis, or inflammatory conditions of the gums is a rare but interesting symptom. A recent case occurred in which the teeth of the lower jaw were completely enshrouded by the gums, which had to be trimmed back on two occasions before the completion of pregnancy. After delivery, the trouble abated rapidly.

Granulations of the eyelids have occurred in a few patients under my observation. These had the appearance of a crop of pedunculated pigmented moles of the size of the head of a pin and occurred on the skin surface of the lids. They



disappeared promptly after delivery, to recur at a subsequent pregnancy.

Ptyalism, is a very disagreeable symptom. I have now under my observation a patient, now at term in her second pregnancy. The salivation has been continuous since the onset of pregnancy and has been most intractable to any form of treatment. It begins at mid-day and lasts until well into the night. One day's actual measurement amounted to a secretion of 19 fluid ounces of saliva. This patient under constant care and observation has at no time showed other signs of toxemia. I am confident however that it is a metabolic disturbance and in that sense toxic, and I have no doubt that it will clear up shortly after delivery. Apparently that was the story during her last delivery, when the patient tells me she had the same troublesome symptom.

The examination of the patient should be made in an unhurried way, systematically with a clear idea as to what the findings mean, basing them upon a common sense interpretation of their relation to pregnancy or delivery. This examination should be thorough. The patient respects thoroughness for she appreciates that her attendant is more valuable to her in proportion to his fidelity in physical observation. Any pathological findings should be repeatedly watched for progress or results of treatment. Consultations help tremendously in interpreting dubious findings, and patients regard consultation as a strength not a weakness, on the part of their attendant.

Just a word about blood pressure. Of course, its regular observation is synonymous with good prenatal study. It is remarkable how little the blood pressure of the patient changes throughout her pregnancy, so that any marked rise in comparison to her observed normal, regardless of any arbitrary limit, should call for painstaking search for other symptoms of toxemia and their interpretation regarding the gravity of the situation and its treatment.

Pelvimetry is perhaps the most important part of prenatal examination. It is an accurate vital check on one of the prime determining factors of the patient's mechanical ability to deliver. The

measurement of pelvis is a good habit, easy to acquire and does not involve expensive or complicated apparatus. Why so many practitioners otherwise careful, look upon this as a difficult or unnecessary procedure is hard to comprehend. There is nothing mysterious or ultra scientific about it. If one cannot measure pelvis accurately, he is not doing his duty to the patient and should inform himself on this simple and vital matter. It is uncompromisingly essential that anyone undertaking an obstetric case should be thoroughly versed in this metric method and capable of interpreting the findings.

The change in body weight of the pregnant patient is of some significance. During the first three months, the weight is stationary or shows some loss, but during the last six months the patient gains about a pound a week. There is a good deal of scientific observation to support the contention that excessive gain in weight is almost a sure sign of toxemia, probably expressed as occult oedema. Another interesting point, and this has been frequently borne out in my own experience, is that in the last three or four days of pregnancy, instead of a gradual increase there is a sudden change to a loss of weight amounting to about a pound daily. Many patients today possess bathroom scales of considerable accuracy, and where these are available one can, with the co-operation of the patient keep a daily weight chart. When the peak has been reached and a sharp drop is noticed, the prophesy that labor is at hand is usually correct. There is a very valuable sign of impending labor.

In conclusion, may I emphasize that when a patient goes into labor, there is nothing more satisfactory to the attendant than, having made a really careful study of the case from all angles, physical, and psychological, he approaches the responsibility of her delivery with confidence and comfort. That confidence is contagious and is mirrored in the solace and equanimity of the patient as she faces her travail.

Adopt this obstetrical slogan, "Adequate prenatal care pays health dividends to mother and baby."

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## RHODE ISLAND MEDICAL SOCIETY

Meets the first Thursday in September, December, March and June

NORMAN M. MACLEOD	<i>President</i>	Newport
ARTHUR H. HARRINGTON	<i>1st Vice-President</i>	Saylesville
FRANK T. FULTON	<i>2nd " "</i>	Providence
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J. E. MOWRY	<i>Treasurer</i>	Providence

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Meets the third Thursday in each month

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**R. I. Ophthalmological and Otolological Society**—2d Thursday—October, December, February, April and Annual at call of President. Dr. J. J. Gilbert, President; Dr. M. J. O'Connor, Secretary-Treasurer.

**The R. I. Medico-Legal Society**—Last Thursday—January, April, June and October. Dr. Creighton W. Skelton, President; Dr. Jacob S. Kelley, Secretary-Treasurer.

## EDITORIALS

### OF CERTAIN POLICIES

It may be of interest to those who have favored us with their patronage in the way of advertisements, to understand something of the policies of the RHODE ISLAND MEDICAL JOURNAL; we are advancing the following for the better understanding of our advertisers that our mutual benefits may be the better appreciated.

Rhode Island is, in population a compact state—the most densely populated state in the Union and therefore reaches many buyers in a small buying area; we have nearly eight hundred physicians, many hospitals, together with a number of allied health organizations and associations; not only does the JOURNAL reach all of these, collectively and individually, but every state medical society in this country and several others, and many prominent scientific libraries of the world. Our JOURNAL is not cumbersome, it is sufficiently attractive as a scientific publication to claim a

gratifying attention and while we might load many additional pages with advertising matter, only the expense of publication is sought. We therefore circumscribe our acceptances of advertisements to usually two of kindred nature and have repeatedly declined others. Furthermore these advertisements must measure up to the standard that we make every endeavor to maintain, and the business or commodity advertised must be of a character that is beyond the pale of suspicious scrutiny; all of which means that our advertisers have the advantage of an exclusive privilege somewhat rare in the advertising world.

And now to the point.

It has been frequently suggested and often urged from various sources that we introduce complimentary notices or reading matter bearing upon commodities (whose excellence is already accepted) advertised in our columns but inasmuch as to favor one and refuse another, this may not be. We appreciate the business given us; we are thankful for it. We are grateful;—but in all fairness we may not buy it upon these terms.

The RHODE ISLAND MEDICAL JOURNAL gives full equivalent for value received.

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### THE NEW ENGLAND HEALTH INSTITUTE

The meeting of the New England Health Institute recently held in Providence was gratifying to its sponsors and especially the local members of the various committees. It was extremely well attended by interested visitors from all parts of New England. Having its beginning four years ago in Hartford, Connecticut, annual meetings have been held in Boston, Portland, Concord and Providence.

The Institute aims to instruct and stimulate the interest of a modern but rapidly growing group of professional workers, active in public health affairs, social service and education, in so far as it deals with health and sanitation. In order to pass on the results of scientific investigation to the great mass of the lay public, such an educational movement as this is of the greatest value. The unbiased opinions of leaders whose activities do not often bring them into contact with large numbers

of people are carefully prepared and presented by representative medical men. The programmes, the efforts of representatives of State Public Health Boards, the U. S. Public Health Service and the Schools of Research and Sanitation attached to the large New England universities, obviously represent all that is best and new in public health work. The list of topics was varied and was handled by over sixty individual papers. An interesting factor of the Providence meeting was the interest shown by physicians themselves—this is most desirable and stimulating to the group of less technically trained professional workers who carry out the actual daily contacts with people. Such a movement as this Health Institute appeals to educational authorities as well as the medical fraternity, and the use of the R. I. College of Education and the R. I. Medical Society Buildings on Francis Street, made an admirable center for the activities of the four days.

It would appear that this annual Institute has a real reason for its existence, that it is showing a very remarkable growth and doing an excellent piece of work, all of which are prime reasons why it should have the firmest support of the medical profession at large.

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### "REPORTABILITY"

Quite recently most physicians of this state received a notice regarding the "reportability" of venereal diseases together with a somewhat elaborate questionnaire to be filled out for each case. It must be admitted that thus far the medical profession has failed to realize that reportable and compulsory reporting are in the minds of the health authorities, one and the same thing and that physicians are required to report their cases. This in the main they have not done and some medical men are suspected of having sent Wasserman specimens under an assumed name. They wish the inestimable knowledge of the precise nature of the patient's condition but do not wish his name to be known by anyone.

This may be explained in several ways but the most likely is that physicians consider such cases as the very essence of professional secrecy and feel that the matter is between the patient and himself. Another and perhaps no less important rea-



son is that the physician knows full well that if he questions his patient too much and takes down too many notes said patient will not continue his treatment and certainly not if he knows his name is to go on record at the State House. Much might be written pro and con.

It is to be assumed that with very rare exception each and every M. D. will assist health officers and bureaus of vital statistics in every way possible for, to do otherwise would be incompatible with our noble science, but such an intimate and private matter as this is perhaps not for record notwithstanding a law which is not and perhaps cannot be enforced. It is one thing for a physician to certify that in a certain period he has had under his care a certain number of cases of syphilis,—it is another for him to certify that John Doe has it. From earliest time the doctor has enjoyed the confidence of his patient, it may be doubted if patients will confide in their physician if they know it is to be made a matter of record. Furthermore, the question might be asked as to the benefit to society were this ruling followed and all cases reported. Perhaps it would be interesting to know how many cases there are, it certainly is impossible at the present time to calculate how many deaths are caused by venereal disease or their sequelae as it is only occasionally that they are given as the cause on death certificates. The immediate rather than the underlying cause is reported. But the same thing is true of pulmonary tuberculosis, the cause of death being given as pneumonia or some other rather than the true or remote cause, and for the reason that sundry insurance would be invalid or somebody's feelings injured. By and large the assumption is possible that the worthy cause of public health will very probably remain unsatisfied in this particular and that private health will continue to receive the very best attention the medical profession can bestow.

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## THE HEALTH INSTITUTE OF NEW ENGLAND

The New England Health Institute recently held in Providence proved to be one of outstanding value and interest. This was its fifth session, previous meetings having been held under the aus-

pices of the State Health Departments of Connecticut, Massachusetts, Maine and New Hampshire. The six New England State Health Departments are responsible for the Institute; with the cordial assistance of, and affiliated with, the United States Public Health Service, the Public Health School of Yale, Harvard, Biological Department of Massachusetts Institute of Technology, and Simmons College, Boston. The sessions last about four days, and usually cover all the principle features of public health work.

The session recently conducted by the State Board of Health of Rhode Island aroused wide interest. Sixty-seven specialists read papers, and as fifteen minutes was allowed for comments on each paper, there was much discussion.

The attendance was good, approximating six hundred. From the number of well known workers in various fields of public health contributing to the program, it would be impossible to indicate those whose papers proved to be of greatest interest. Special mention, however, could be made of Dr. W. H. P. Faunce, President of Brown University; the five men assigned to the Institute by Surgeon-General Cumming of the Public Health Service; our own Doctor Chapin; Doctor Godfrey, Epidemiologist of New York; Dr. Howard A. Streeter, Health Officer of Manchester, N. H.; Prof. Aycock of Harvard; Prof. Frederic P. Gorham of Brown University; Dr. Frank Richardson of Brooklyn; and Prof. Young of the State Health Department of Michigan.

The Chairman of the Program Committee, Doctor Gleason, Director of the State Department of Child Welfare, was successful in securing the assistance of twelve able chairmen of the sections.

Entertainment provided was very carefully planned. Tea was served by Miss Mary Gardner to the nursing group. Mr. Luther Burlingame arranged for visits to several of our industrial plants. A luncheon was provided for the visitors by the Gorham Manufacturing Company. Visits were made to the new Water Works Plant of the City of Providence, and a luncheon and clinical demonstration were arranged for by Dr. Harry Lee Barnes at Wallum Lake. Interested private individuals and State Departments loaned automobiles for the transportation of guests on the various trips.

Most gratifying of all was the very cordial co-operation and assistance by many members of the Rhode Island State Medical Society and the public press.

The next Institute will be held in 1928 in Vermont, and the question has arisen as to whether or not the Institute will continue its sessions after that time. I am firmly convinced that it should not be terminated. We have many public health problems in common in the New England States, some of which are not of especial interest to the country as a whole.

Most of the speakers presented their subjects by the use of notes, and it will, therefore, be impossible to publish their interesting addresses. Some, however, read manuscript papers, many of which I hope to secure that they may find a place in later issues of the Rhode Island Medical Journal.

Respectfully,  
B. U. RICHARDS, M.D.  
*Commissioner of Public Health*

## SOCIETIES

### PROVIDENCE MEDICAL ASSOCIATION

(PROVIDENCE DISTRICT SOCIETY)

The regular monthly meeting of the Providence Medical Association was held at the Medical Library, 106 Francis Street, Monday evening, October 3, 1927, at 8:45 o'clock with the following program:

1. Pernicious Anemia and its Treatment. Dr. Guy W. Wells.
2. Typhoid Meningitis in a Baby two months old. Dr. Panos Dukakis. Providence City Hospital.

The Standing Committee approved the following application for membership:

DR. ARCADIE GIURA  
PETER PINEO CHASE, M.D.,  
*Secretary*

## HOSPITALS

### THE MEMORIAL HOSPITAL

Meeting of the Memorial Hospital Staff held October 6, 1927:

Meeting called to order by President Wheaton at 9:15 P. M. Record of attendance taken. Record of previous meeting read and approved.

Dr. Wheaton reported on a change in the method of receiving case reports.

Dr. Wing reported on ways and means to entertain members of Staff at meetings. Discussion opened by Dr. Hammond. Readings of the MEDICAL JOURNAL or of items of interest in each special department would be of assistance.

Motion passed that method of entertainment be left in the hand of committee of which Dr. Wing is chairman.

Dr. Hammond gave a very interesting talk on "Osteomyelitis."

Meeting adjourned at 10:00 P. M.

JOHN F. KENNEY, M.D.  
*Secretary*

## MISCELLANEOUS

### THE ANTITOXIN IN THE SERUM

We speak of antitoxic serums, or antisera, as the equivalent of antitoxin; but the serum simply contains the antitoxin, and along with it certain other ingredients that it has been the object of biologic research for the past thirty years to get rid of. These are, so far as known, albumins and euglobulins. The former have been separated, to a large extent, from the antisera, but the antitoxic principle is very closely linked with a globulin or a pseudoglobulin so that separation of these has been found extremely difficult.

The albumins and euglobulins are believed to be responsible for the serum sickness and serum sensitiveness that sometimes follow the use of antisera.

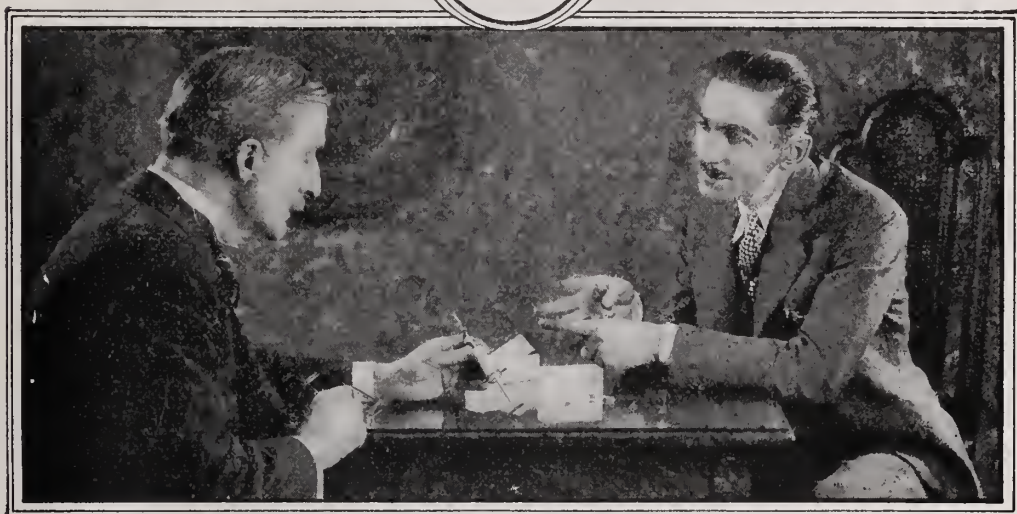
An absolutely pure antitoxin has yet to be developed, but the analytic work of the pioneers in biologic therapy has at last succeeded in simplifying the problem to a certain extent. Certain diphtheria antitoxins now being offered are concentrated and the freest from all objectionable features that have been heretofore supplied. It is almost water-white in its purity, and contains a minimum, perhaps the irreducible minimum, of albumins and euglobulins.



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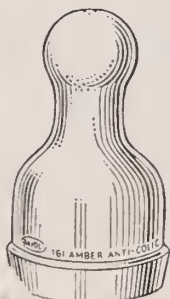
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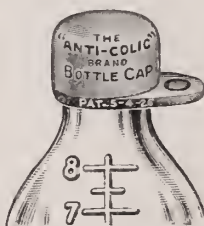
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PROVIDENCE, R. I., U. S. A.

# THE RHODE ISLAND MEDICAL JOURNAL



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NO. 12.

{ Whole No. 219 PROVIDENCE, R. I., DECEMBER, 1927

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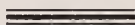
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## ORIGINAL ARTICLES

### ACUTE INTESTINAL OBSTRUCTION.\*

GEORGE A. MOORE, M.D.

BROCKTON, MASS.

There are few diseases encountered in surgical practice today that are of more vital importance and of more general interest than acute intestinal obstruction.

After a half century of study by clinicians and a somewhat shorter period of investigation by laboratory workers, acute intestinal obstruction remains practically as far from a solution as at the beginning of the aseptic era of surgery. A few facts regarding diagnosis have been established and a host of theories of the cause and treatment of the toxemia evolved.

In 1888 R. H. Fitz<sup>1</sup> reported a series of 295 cases of acute intestinal obstruction, with a mortality of 80% of the patients operated upon. Of those operated upon 3 to 6 days after onset the mortality was 66%. Twenty years later in 1908, Scudder<sup>2</sup> published a series of 121 cases from the preceding 10 years' records of the Massachusetts General Hospital in which the mortality rate was 60%. Deaver and Ross<sup>3</sup> reported, in 1914, a death rate of 42% in 276 cases. McGlannan<sup>4</sup> in 1915, a mortality of 45% in 276 cases and Codman<sup>5</sup> in 1920, 41 cases with a mortality of 34%. A second 10-year series of cases from the Massachusetts General Hospital was reported by Richardson<sup>6</sup> in 1920, with a mortality rate of 41.5%. In 1925 I<sup>7</sup> recorded a series of 61 cases from my private work with a mortality of 30%. It is thus apparent that while there has been a reduction in the mortality rate of acute intestinal obstruction in the past 40 years, it is still far too high.

My experience with acute intestinal obstruction has been confined to the clinical aspects of the disease. I shall, therefore, attempt to emphasize what have seemed to me the important points in the bed-

side management of patients with obstruction, with a report of my present series of private cases.

It can be stated with a fair degree of accuracy that, with the exception of the cases of acute intestinal obstruction resulting from recent post-operative adhesions, fully 90% of all patients suffering from this disease are seen first by their family physicians. During the early stages, at least, of acute obstruction, an intimate knowledge of the more recent methods of diagnosis, the theories regarding the cause of the toxemia and the significance of the latest laboratory tests are not essential. Of greater value in clinical practice in acute intestinal obstruction is a thorough knowledge of the early symptoms of the disease, a careful study and a quick perception of these symptoms and sound judgment in deciding when medical treatment should cease and surgical intervention be advised.

Since there is no known method of combatting the late symptoms of the toxemia of acute intestinal obstruction, and since the percentage of cases resulting from recent post-operative adhesions is small, it is only by early diagnosis on the part of the general practitioner followed by early operation that a reduction in the mortality rate is to be expected.

Clinically, acute intestinal obstruction may be divided into two groups:

1. Simple obstructions with normal blood supply to the obstructed loop.
2. Strangulations, in which there is interference with the blood supply to the obstructed loop.

In practice there appears to be another group, which may be classified as a sub-group under simple obstructions and strangulations. These patients have complete obstruction to the passage of feces from the onset of symptoms, but gas escapes past the site of obstruction during the early hours or even days of obstruction. Complete obstruction to feces and gas eventually occurs either with or without strangulation. The distinguishing feature of these cases is their surprisingly good condition considering the reported duration of obstruction.

\*Presented at the meeting of the Providence Medical Association, May 2, 1927.

The following case is illustrative of this type of case terminating in simple obstruction: Man of 48 had generally increasing constipation for the past year. He had no movement for 8 days, but on questioning stated that during that time he passed gas by rectum. Laxatives and enemas had been unproductive. He had very little abdominal pain. Had passed no gas for 30 hours. He was in excellent condition for an 8 day obstruction. Usual pre-operative preparation, operation under local anaesthesia and a little ether. Annula carcinoma of sigmoid found with metastases. First stage Mikulicz and cecostomy done. Ileostomy done two days later on account of lack of function of cecostomy and sigmoidostomy. Recovery from obstruction with eventual death from metastases.

The following case illustrates this sub-group which terminates in strangulation: Man 36, St. Luke's Hospital, Middleboro, April 18, 1927, operated by me in 1923, appendectomy with drainage for acute suppurative appendicitis. Made a good recovery and stated that he had no trouble with bowels until three days ago. No movement since then, with severe colicky pain over right abdomen. Has taken numerous laxatives and enemas. Vomited frequently for past three days. Slight assymetrical distension, moderately pale, but otherwise in good condition. Vomitus very foul. Operation under local anaesthesia and ether. Band of adhesions found between ileum and head of cecum and 18 inches of moderately dilated ileum strangulated by band. The strangulated loop proved to be viable. Patient recovered. No history of the passage of gas was obtainable on account of the patient's stuporous condition from Morphine and Scopolamine when examined. From the excellent condition of the patient, the viability of the strangulated loop, the moderate distention and the fact that the patient recovered, it was evident that strangulation existed less than 3 days and that gas probably had been passed.

In the group of simple obstructions without interference with the blood supply may be classed, post-operative adhesions, early and late; adhesions and bands without preceding operation, Meckel's diverticulae, internal herniae, intestinal strictures of inflammatory, congenital or cancerous origin and foreign bodies. Strictures and foreign bodies are the most frequent cause of simple obstruction seen in the late stages. Of the other causes mentioned, simple obstruction is frequently seen in

the early stages often becoming strangulations later as a result of edema of the bowel wall and distension.

The onset of symptoms in this type of obstruction is often insidious and deceptive, abdominal discomfort gradually developing into moderate pain, frequently above the navel on the left, if the small intestine is obstructed, and below the navel if the large intestine is obstructed. Nausea and vomiting occur, usually after a few hours, if the small intestine is constricted, but later in obstruction of the large intestine. Enemas are more likely to be productive in the obstructions involving the small intestine. Distension is often a late symptom. Auscultation with the stethoscope is a diagnostic aid in these cases as well as an aid in locating the site of obstruction. A high white count in these obscure cases is of diagnostic value. The silent abdomen on auscultation, distention, cyanosis and stercoraceous vomiting are in most cases signs of impending death.

The following case is an example of this type of acute intestinal obstruction. Man, 57 years, developed acute pain in the right lower quadrant of the abdomen, which gradually subsided after ten days. These symptoms were followed by severe constipation and though he was able to pass gas by rectum, he had no satisfactory movement for a week prior to operation. General abdominal discomfort, developed into severe pain two weeks after onset of symptoms, accompanied by frequent vomiting. Pale, poorly nourished, abdomen greatly distended and visible peristalsis noted. Operation under novocain; enormously dilated large intestine found due to a mass of adhesions about lower sigmoid due to pelvic peritonitis probably from a ruptured appendix. Cecostomy done followed by small amount of drainage and death two days later.

Strangulation of the obstructed loop of intestine is seen frequently in most types of acute obstruction except those caused by foreign bodies and strictures. Its most frequent occurrence is in volvulus, herniae, external and intra-abdominal and intussusception after the early hours. The types of obstruction resulting from bands of adhesions terminate in strangulation frequently. Coincident with the onset of a strangulation, unmistakable symptoms of an abdominal catastrophe are usually apparent. Sharp, colicky pain, intermittent and paroxysmal at first, gradually becoming constant, accompanied early in the course of the disease by



nausea and vomiting. Constipation is frequently observed by the patient soon after onset and enemas are unproductive. The facies is pale, drawn and anxious, extremities are cold and the temperature subnormal in the early hours, rising to normal, or slightly above, later in the course of the disease. Abdominal examination yields little of diagnostic value except hyper-peristalsis on auscultation and in some cases a definite point of tenderness over the site of obstruction.

Illustration: Man, 26, operated at the Moore Hospital, January 18, 1921, for appendix abscess. An appendectomy with drainage was done. Convalescence rather stormy, February 8, began to have upper abdominal discomfort which gradually developed into cramp-like pain. Given enemas without results. Tumor appeared in epigastrium Feb. 10, pain continued. Enemas given with good fecal and gas results. Temperature and pulse not increased. Stomach washed several times Feb. 11 and 12, slight vomiting, no odor to vomitus. At operation Feb. 12, collapsed coils of small intestine were found in the left upper abdomen. A volvulus of the jejunum was found causing complete obstruction. The volvulus was relieved and a Witzel enterostomy done above the site of obstruction and the contents moved through the site of obstruction. Patient recovered.

The symptoms of intussusception differ somewhat from a true strangulation in that the onset of the attack is characterized by abdominal pain and frequently collapse. The paroxysms of pain occur somewhat less frequently, but at regular intervals 5 or 10 minutes apart and between these paroxysms the child is comparatively comfortable. Fecal movements occur early in the disease, followed by mucus and blood. A tumor somewhere along the course of the colon, more often under the edge of the liver can be palpated in many cases. Illustration: Boy, 10 months, November 16, 1921. Child became ill Nov. 14, vomited frequently and passed streaks of blood and mucus. Attacks of pain were observed occurring at regular intervals. Baby pale, crying out frequently with apparently severe pain, abdomen soft, no masses palpated. Operation: large sausage-shaped mass extending from right lower quadrant up around upper abdomen and down into the pelvis involving the entire large intestine. Entire mass milked out of intestine and it was found that about 18 inches of ileum had become invaginated into the large intestine includ-

ing about four inches of the ascending colon. Baby in considerable shock, rallied about one hour, but grew worse and died.

The responsibility for late diagnosis and late surgical intervention in acute intestinal obstruction is frequently placed upon the general practitioner. Of a series of 77 cases of acute intestinal obstruction which I wish to present for your consideration, I have had an opportunity to observe but 6 during the initial stages of the disease. Seventy-one patients of my series were referred to me at varying stages in the course of the disease by physicians in general practice.

It is my impression that cases which gradually develop acute obstruction, preceded by months of intestinal trouble and chronic constipation, present an extremely difficult problem with regard to the time when medical treatment should cease and operation be advised. It is this type of patient, who so frequently consults a physician late or refuses operation in the early stages of the disease. The proper management of cases of this kind is something that is not taught in the medical schools or hospital internships and is only acquired by much experience, painstaking study of the patient and excellent judgment.

In 1925 I became interested in learning something about the family physician's experience with acute intestinal obstruction. As a result of answers to a questionnaire which I submitted to 25 doctors, I found that the occurrence of acute intestinal obstruction in their practice was one case in about three and one-half years of practice. They were generally called to cases of obstruction late in the course of the disease and in the majority of cases referred them to the surgeon without delay. The result of this investigation led me to conclude that ignorance on the part of the laity, regarding the early symptoms of acute intestinal obstruction, is an important factor in the delay in diagnosis in many cases. The general practitioner's responsibility for the high surgical mortality is perhaps less than has been suggested in many recent articles on acute intestinal obstruction.

A vast amount of excellent experimental work has been carried out in recent years to determine the cause of the toxemia of acute intestinal obstruction. These investigations have resulted in a host of theories regarding the pathology and biochemistry of this condition. Certain facts have apparently been established which are of value in



the prognosis of a given case, and while new methods of treatment of the toxemia have been suggested, which have been of value in some cases, no method has as yet been offered which is of benefit to the severely toxic patient.

The question of the causation of the toxemia in acute intestinal obstruction as Murphy and Brooks<sup>8</sup> stated in 1915, must be dependent upon two processes, the production and absorption of the toxin. Whipple<sup>9</sup> and his co-workers believe that the toxin is a primary proteose produced by a perverted activity of the mucosa of the obstructed loop of intestine. Murphy and Brooks<sup>10</sup>; Dragstedt, Moorhead and Burcky<sup>11</sup>; Hartwell and Hoguet<sup>12</sup> and other investigators have stated that the toxin is produced by bacterial activity in the obstructed loop of intestine resulting in a proteolysis and putrefaction of the contents of the loop. They believe that absorption of the toxin occurs only in the presence of damaged mucosa, that the damage to the mucosa may result from the trauma of the constricting band, twist of a volvulus, etc., or from over-distension.

Haden and Orr<sup>13</sup>, who have recently done excellent experimental work on acute intestinal obstruction state that early in the course of the disease, there is a rapid decrease in the chlorides and a coincident increase in the alkali reserve in the blood with a marked decrease of chlorides in the urine. A late manifestation is an increase in the non-protein and urea nitrogen in the blood. They advance the theory that as a result of the excessive vomiting a large amount of hydrochloric acid is lost which normally combines with the intestinal secretions resulting in the formation of sodium chloride for absorption.

Haden and Orr<sup>14</sup> have shown by experiments on dogs that the administration of saline solution will prolong life up to 30 days after obstruction is produced. In the treatment of acute intestinal obstruction they advise the administration of 1 gram of sodium chloride for each Kilo body weight in 1 to 2% solution by hypodermoclysis and 5% solution by vein or about 2 oz. of salt to an individual weighing 150 lbs.

Practically all investigators of acute intestinal obstruction are agreed that an essential factor in the production of the oxemia is hydration. Gamble and MacIver<sup>15</sup>, however, feel that dehydration alone as a cause of the toxemia is inadequate as there is a loss of the electrolytes sodium and chlo-

rine. They suggest that the essential factor in the treatment of dehydration is the replacement of these ionic factors of the body fluid structure.

As a result of the rather general study of the blood chemistry of patients with acute intestinal obstruction there is an apparent concurrence in the belief that an abnormal destruction of tissue protein and depletion of blood chlorides occurs, resulting in a high non-protein nitrogen and urea nitrogen in the blood, low plasma chlorides and high carbon dioxid combining power of the blood plasma. McVicker states that by the administration of sodium chloride with glucose by hypodermoclysis and by vein and by frequent studies of the blood of patients with intestinal obstruction, the progress of the toxemia can be determined, thus making it possible to fairly determine the prognosis in a given case.

A patient with acute intestinal obstruction not only has an interference with the passage of intestinal contents which requires surgical intervention, but is also suffering from the systemic effects of the disease. It has seemed to me that therapeutic measures which would alleviate the toxemia were fully as essential to the recovery of the patient as the mechanical relief of the obstruction. The late John B. Murphy once stated that many intestinal obstruction cases died cured of their obstruction.

A reasonable length of time spent in pre-operative treatment of a patient with acute intestinal obstruction may make of him a better risk and in those cases, which are not too toxic, may influence the ultimate prognosis. Haden and Orr have suggested that the administration of sodium chloride before operation is a distinct benefit in toxic cases. At the Mayo Clinic, sodium chloride and glucose are administered in cases with high obstruction and operation delayed until the N. P. N. and blood chlorides are within normal limits. Morphine, stimulants and external heat are a decided benefit to the patient with symptoms of shock. Lavage is essential, especially when a general anaesthetic is to be used to prevent suffocation from aspirated vomitus and pneumonia.

The ideal anaesthetic in operations for acute intestinal obstruction would be one in which the patient would remain conscious, but would have complete abolition of abdominal pain and spasm. Ether causes vomiting and interferes with intestinal peristalsis. Gas, oxygen or ethylene, though

better than ether, may cause vomiting and may not relax abdominal muscles. Spinal anaesthesia at levels sufficiently high to permit abdominal exploration is reported to be attended with considerable danger. At the lower levels, 4th and 5th lumbar interspaces, it does not give adequate anaesthesia for exploration. Local anaesthesia by the block method or infiltration is ideal when exploration is not contemplated, but in my experience is never satisfactory if an extensive search for the cause of obstruction is carried out. In several cases I have used scopolamine and morphine preceding local novocain and have been able to search for the cause of obstruction over a considerable area. In the majority of cases in which I have begun the operation with local novocain, a small amount of ether was necessary, if exploration were deemed advisable.

Richardson has said that "the particular method of dealing with a given case (of intestinal obstruction) perhaps presents as great a test of skill and judgment as any that occurs in acute surgery." Standardized operation for different types of acute intestinal obstruction are hardly to be expected. A careful study of the individual case and an operation to fit the needs of the patient's condition and the pathology found on opening the abdomen are of the utmost importance. A resection with enterostomy above the anastomosis is often attended with excellent results in the early, less toxic cases, but may be a deciding factor in a fatal termination in a late toxic case. Enterostomy under local anaesthesia is often all that is justifiable to do for the advanced toxic patient. To locate the cause of obstruction, remove it and establish drainage of the obstructed bowel, both to normal bowel below, and by means of an enterostomy is the ideal operation which rarely is well borne by the toxic patient.

The question of the employment of jejunostomy in late obstruction as advised by many writers, notably Victor Bonney<sup>16</sup>, Handley<sup>17</sup>, Rankin<sup>18</sup>, McKinnon<sup>19</sup>, Taylor<sup>20</sup> and C. H. Mayo<sup>21</sup>, has been studied experimentally by Haden and Orr. These writers produced high intestinal obstruction in dogs and administered a sufficient amount of sodium chloride to maintain the blood chlorides at the normal level. They then did jejunostomies on part of these dogs and found that the dogs on whom

they did jejunostomies lived a shorter time than those with high jejunal obstruction alone. They found also that simple jejunostomy on dogs without obstruction produced death in two to five days and that "all these dogs showed a decrease in blood chlorides and a rapid rise in urea and non-protein nitrogen."

Haden and Orr concluded that jejunostomy in dogs does not prevent the chemical changes in the blood characteristic of acute obstruction and that jejunostomy tends to shorten life in dogs with high experimental obstruction.

In reviewing my own series of cases I have noted a few fatal cases in which there was a striking similarity in the symptoms to the experimental work reported by Haden and Orr. The following case is an illustration: Woman, 53, six days before operation began to have pain in the abdomen. She vomited frequently. Enemas were returned with small masses of feces. There was fever, abdomen level tympanitic, no masses, slight tenderness in right lower quadrant. X-Rays showed high jejunal obstruction not more than 3 to 4 feet from the duodenum. Operation: small knuckle of proximal jejunum found strangulated in a defect in the mesentery. Jejunostomy done above obstruction and small necrotic area in intestine infolded. The jejunostomy functioned freely, failed to close on removal of the tube, and the patient died twelve days after operation. The dangers of excessive prolonged drainage from a jejunostomy and the necessity of great care in doing an enterostomy, especially using the Witzel technic, so that the opening will close spontaneously on removing the enterostomy tube have been mentioned by Jones and several other writers in recent years.

The series of 77 cases of acute intestinal obstruction here reported, have been encountered in my private practice in the past fifteen years. Only patients suffering from some form of mechanical obstruction have been included in the series. A small group of patients whose condition was so serious that operation was considered unwarranted as well as a few patients with pyloric obstruction from cancer and ulcer were omitted. All patients observed suffering from acute intestinal obstruction, who recovered under medical treatment and patients operated upon for incomplete and chronic obstruction were excluded.

## CHART I

*Acute Intestinal Obstruction*

Duration and Mortality at different sites in intestinal tract.

	No.	R.	Hrs.	D.	Hrs.	Mt.	Hrs.	Male	Female
					Tl.				
Large .....	14	6	50	8	110	57	95	5	9
Small .....	27	18	64	9	132	33	87	17	10
Intuss. ....	6	2	10	4	42	66	32	4	2
Herniae ....	30	27	35	3	78	10	42	19	11
	—	—	—	—	—	—	—	—	—
	77	53	38	24	91	36	64	45	32

R: Recovered.

Hrs. Duration from onset to operation.

Mt. Mortality.

Tl. Hrs. Duration of obstruction in all cases.

It has seemed of interest to group my cases first according to the site of obstruction. This method of grouping is of value in a study of the incidence of acute intestinal obstruction at different sites. Of further interest in this chart is the fact that the average duration of acute obstruction of the 77 patients was a little over 2½ days, which might well be the greatest contributory factor in the mortality rate of 36%. Emphasis of the importance of the duration of obstruction and its relation to the mortality rate is brought out in this chart by a comparison of the 53 patients who recovered following a period of acute obstruction averaging 38 hours with the 24 patients who died after on average duration of acute obstruction of 91 hours.

## CHART II

Mortality computed on duration of obstruction.

	1 to 12 Hrs.				12 to 24 Hrs.			
	No.	R.	D.	Mt.	No.	R.	D.	Mt.
Large .....	0				0			
Small .....	3	3	0	0	1	1	0	0
Intuss. ....	2	2	0	0	0			
Hernia ...	9	9	0	0	6	6	0	0
	14	14	0	0	7	7	0	0
	24 to 48 Hrs.				48 to 72 Hrs.			
	No.	R.	D.	Mt.	No.	R.	D.	Mt.
Large ...	3	2	1	33%	4	3	1	25%
Small ...	7	4	3	43%	5	5	0	0
Intuss ...	3	0	3	100%	1	0	1	100%
Herniae ...	8	7	1	12½%	3	2	1	33%
	21	13	8	38%	13	9	3	24%
	All over 72 Hrs.							
	No.	R.	D.	Mt.				
Large .....	7	1	6	86%				
Small .....	11	5	6	55%				
Intuss .....	0	0	0	0				
Herniae .....	3	2	1	33%				
	21	8	13	62%				

The value of early operation is also evident in chart 2, which shows that of 21 patients, who submitted to operation for acute intestinal obstruction during the first 24 hours of symptoms of the disease, there were no deaths. There were 21 patients operated upon during the second 24-hour period of acute symptoms, 8 of whom died, a mortality rate of 38%. The series of 21 patients, who came to operation after the third day of acute intestinal obstruction showed a mortality rate of 62%.

While the value of early operation in acute obstruction is emphasized by these statistics, there is suggested also the inadequacy of surgery and of methods of combatting the toxæmia of late obstruction.

## CHART III

Mortality computed for types of cases.

Diagnosis:	No.	R.	D.	Hrs.	Mt.
Ca. Colon .....	10	4	6		60%
Volvulus .....	4	2	2		50%
Intuss. ....	6	2	4		66%
Late P. U. Adh. ....	10	6	4	106	40%
Early P. O. Adh. ....	6	5	1	54	16%
Bds. & Adh. Unk. Cause...	7	4	3	99	43%
Meckels .....	2	2	0		0
I. C. Tbc. ....	1	0	1		100%
Gall Stone Imp. ....	1	1	0		0
Ing. ....	22	20	2	44	9%
Hernia Fem. ....	5	5	0	39	0
Vent. ....	3	1	2	56	66%

P. O. Adh. Post Operative Adhesions.

Bds. & Adh. Unk. Cause. Bands and adhesions unknown cause.

I. C. Tbc. Ileocecal tuberculosis.

In recent years, I have delayed operation in the late toxic cases of acute intestinal obstruction for periods varying from one to four hours. During this interval saline solution was administered by hypodermoclysis and glucose by vein, gastric lavage was done and stimulants given subcutaneously.

The patients who have been subjected to pre-operative treatment are as yet too few in number to be of great value in drawing conclusions. The fact that this method was used only in extremely toxic cases and in none of the milder types of obstruction affords one a rather poor opportunity of estimating its value. It has seemed from observing these cases, that extremely toxic patients were in but few instances permanently benefited by the treatment; however, it lessened apparently the risk of operation somewhat in a certain number.



My experience with enterostomy in acute obstruction has been confined largely to the extremely toxic cases. Of the series of 77 cases external drainage was attempted in 28 with a mortality rate of 67%. These results, however, can hardly be considered as evidence against enterostomy as most of the patients were in extremely grave condition. The value of enterostomy in acute obstruction, properly safeguarded to prevent excessive drainage, is at present unquestioned. A wider acceptance of this operation not only in the late cases of intestinal obstruction, but in the earlier cases and in peritonitis is evident from recent literature.

In a future communication I hope to be able to report upon statistics on acute intestinal obstruction based upon the two general classifications of simple obstruction and strangulations.

In conclusion, I have attempted to show that: 1, Acute intestinal obstruction may be classified as obturation, in which the blood supply to the obstructed loop is intact, and strangulation, in which the blood supply is interfered with. 2, According to statistics of my series of cases operations for acute intestinal obstruction during the first 24 hours of symptoms resulted in the highest percentage of recoveries. 3, Since no treatment for the late toxic symptoms of acute intestinal obstruction has given promise as yet of relief of this condition, shortening the average duration of obstruction from onset to operation is the surest method that can be offered at present to reduce the present high mortality.

#### REFERENCES

- <sup>1</sup>R. H. Fitz: Boston, M. & S. J., 119-19-Nov. 1-1888-445. <sup>2</sup>Scudder: Northwest Medecaine, Oct., 1908. <sup>3</sup>Deaver & Ross: Quoted by Johnson, Boston, M. & S. J., 83-10-296. <sup>4</sup>McGlauman: Quoted by Johnson, Boston, M. & S. J., 83-10-296. <sup>5</sup>Codman: Boston, M. & S. J., 82-420. <sup>6</sup>Richardson: Boston, M. & S. J., 83-10-288. <sup>7</sup>Moore: Boston, M. & S. J., Dec. 24, 1925. <sup>8</sup>Murphy & Brooks: Arch. Int. Med., 15-1915-392. <sup>9</sup>Whipple, Stone & Bernheim: J. Exp. Med., 1913-18-307. <sup>10</sup>Murphy & Brooks: Arch. Int. Med., 15-1915-392. <sup>11</sup>Murphy & Brooks: Arch. Int. Med., 15-1915-392. <sup>12</sup>Dragstedt, Moorhead & Bucky: J. Int. Med., 25-1917-421. <sup>13</sup>Hartwell & Hogue: Arch. Int. Med., 13-1914-701. <sup>14</sup>Haden & Orr: Southern M. J., 19-4-Apr., 1926-300. <sup>15</sup>Haden & Orr: J. A. M. A., 87-9 Aug. 28, 1926-632. <sup>16</sup>Gamble & MacIver: Quoted by Haden & Orr, Aug. 28, 1926-632. <sup>17</sup>Bonney: Brit. M. J. 1-583-Apr. 22-1926. <sup>18</sup>Handley: Brit. M. J., 1-519-Apr. 8, 1916. <sup>19</sup>McKinnon: J. A. M. A., 77-273-July 23-1921. <sup>20</sup>Taylor: Brit. M. J., 2-993-Nov. 28, 1925. <sup>21</sup>C. H. Mayo: J. A. M. A., 79-194-July 15, 1922.

#### HYPERESTHETIC RHINITIS\*

By FRANCIS B. SARGENT, M.D.  
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Hyperesthetic rhinitis or vasomotor rhinitis is an anaphylactic reaction caused by the sensitization of the individual affected to some foreign protein. The reaction occurs in the conjunctival, nasal, tracheal and bronchial mucous membranes. The disease tends to run in families and is more common in hypersensitive nervous persons.

The seasonal type, or hay-fever, is better understood. In this locality we can roughly divide it clinically into three classes. First, a type due to tree pollens occurring for about three weeks in May, and caused by maple, pine, privet, locust, etc. Second, the grass type caused by timothy, redtop, June grass, orchard grass, wheat and rye, which lasts from the middle of June to the middle of July. Third, the late type caused by ragweed, cosmos, goldenrod, aster, sunflower. This type is most severe and lasts from the middle of August well into October.

It has been our experience that sensitization to the pollen of a single plant is the exception rather than the rule, particularly in the earlier types. In autumnal hay-fever, sensitization to one pollen, ragweed, is not unusual. Sensitization is not always constant, frequently changing considerably in the course of two or three years.

For example: Mrs. D. L., age 34 yrs. First treated in June, 1925. Had June and autumnal hay-fever for many years. Has had inoculations for five years, which relieved the early type, but made no impression on the late type.

#### REACTIONS

1925	1926	1927
Redtop	Redtop	Same with addition
Orchard grass	Orchard grass	of goldenrod.
Ragweed	Ragweed	
Sunflower	Sunflower	
Daisy	Timothy	
Goldenrod	Sweet vernal	
Golden glow	June grass	
	Cosmos	

After having hay-fever for several years, the sufferer frequently develops asthma during the winter months due to a secondary sensitization of the perennial type, often of bacterial nature.

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The perennial type of vasomotor rhinitis is non-seasonal, and lasts all the year. The sneezing, watery discharge from the nose, and itching of the eyes may occur every day in the year if the victim is exposed to the offending protein. Animal emanations, foods, orris root and bacteria comprise the offending proteins in this group. Bacterial sensitizations are probably secondary, the primary sensitization being due to some other protein. Dust and changes in temperature cause acute irritation to the nasal mucous membranes of many of the sufferers in this group. Neurotics with vasomotor instability manifest nasal vasomotor symptoms without apparent sensitization.

Diagnosis is made by skin tests. Multiple scratches are made on the skin and the powdered extract of the suspected proteins is applied to the abrasions, using a two percent solution of sodium hydroxide to dissolve the powder.

If the patient is not sensitized, no reaction will take place. If sensitization is present a round wheel from one-quarter to one inch in diameter will form. Results are very satisfactory when dealing with air borne sensitizing proteins; the foods are more unreliable.

In the pollen type of this disease, inoculations with increasing doses of the offending pollens are usually effective.

The skin is first tested with varying dilutions of the protein to be used for inoculation and the dilution just below the weakest one producing a reaction on the skin is used for the first subcutaneous injection, 0.1 c.c. of this substance being used. Every five days the dose is increased 50-100 percent until fifteen to twenty inoculations have been given. If reaction occurs from any of the inoculations, the doses are given more slowly. A hypodermic containing 15 min. of 1:1000 adrenalin should be kept ready for use in anaphylactic shock when giving these inoculations. Severe reactions may be expected if doses sufficiently large to afford relief are given.

In the perennial type, the offending protein may often be removed from the patient's environment. This is particularly true of animal emanations and orris root. In cases of sensitization to certain foods, these can often be eliminated from the diet. If bacteria are a cause of sensitization, an auto-genous vaccine can usually be obtained and administered. This is usually very successful.

Many cases of undoubted vasomotor rhinitis give no skin reaction.

In this group more than half of the patients have a low blood calcium, which is advantageously treated by the administration of calcium and parathyroid and even by the air-cooled ultra violet lamp.

Soothing oil sprays containing menthol are of value in allaying paroxysms of sneezing and preventing foreign substances from irritating the nasal mucous membrane.

Correction of gross internal nasal obstructions is to be recommended particularly in pollen sensitization. The operation should be performed after the attack has subsided. In the perennial disease, operation almost invariably makes the patient more uncomfortable, the nasal obstruction becoming worse than ever as a result of operative procedure.

Following are some case reports:

Miss S. Age 21 yrs.

C. C. Nasal obstruction, sneezing and watery discharge for four years. She had a submucous resection one and a half years ago, which gave no relief. The patient was tested with eighteen pollens and forty-four other proteins. Strongly positive reactions were maple, orange and string-bean. Smaller reactions occurred to orchard grass, orris, goose feathers and chicken feathers. Elimination of feather pillows and orris root from the patient's environment and of oranges and string-beans from the diet improved the patient's condition markedly until she came down with a severe hay-fever in May due to maple, which was not recognized in time for preventive inoculations.

CASE No. 2. Mr. R. C. H. Age 36 yrs.

First treated in October, 1926. For several years has been a sufferer with autumnal hay-fever due to ragweed. Every fall at the end of the hay-fever season he develops asthma which lasts through the early part of the winter.

In 1921 he had a submucous resection and several nasal polypi removed. About once a year since then he had been operated on for nasal polypi.

Examination revealed the presence of polypi in the right nostril which were removed. The blood calcium was low. Protein tests showed reactions to ragweed, sunflower, orris root, egg, pork, rye, lamb, tobacco, lettuce and cheese. He was in-

structed to remove the sensitizing foods from his diet and given 30 grains of calcium lactate daily. In four weeks his blood calcium was normal and all nasal and asthmatic symptoms had disappeared.

The patient remained well until the middle of April when sneezing and asthma returned. Early pollens had not been tested for and this was done at this time, revealing strongly positive reactions to poplar and locust. The blood calcium was down again and he started to take more calcium lactate. It was too late to immunize him to tree pollens and his symptoms continued well into May, when they disappeared.

CASE No. 3. Mrs. R. B. Aged 28 yrs. Treated in January, 1926.

For five years has suffered with spells of sneezing, most severe during August and September. She had lost 40 lbs. Examination of the nose revealed a typical vasomotor rhinitis with white swollen mucous membranes.

Protein tests showed a strong reaction to potato, goose feathers, duck feathers, Pneumo I, beans, ragweed, tall and short, and timothy. Her blood calcium was very low.

She was treated by large doses of calcium lactate and given fifteen exposures to the air cooled ultraviolet light. Her blood calcium was then found to be normal and her nasal symptoms disappeared. Ragweed inoculations were refused and the usual attack of autumnal hay-fever occurred. As her nasal symptoms continued well into November the calcium and ultraviolet therapy was repeated with the usual relief. She has now been free from symptoms for five months.

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#### POST-OPERATIVE COMPLICATIONS\*

A Comparison Between Ether and Nitrous Oxid  
in 5,000 Cases

By ALBERT H. MILLER, M.D.

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"The 'numerical system' of which Louis was the great advocate, if not the absolute originator, was an attempt to substitute series of carefully recorded facts, rigidly counted and closely compared, for those never-ending records of vague, unverifiable conclusions with which the classics of the healing art were overloaded."—O. W. Holmes.

A physician, who was to undergo an operation under general anesthesia, inquired anxiously about the chance of his developing certain circulatory and pulmonary complications after the operation. To answer his very proper inquiry, it was necessary to study the results of a series of operations. Five thousand consecutive operations under various general anesthetics were chosen. In 1493 of the cases, nitrous oxid-oxygen was the anesthetic. In 3501, ether had been administered. The circulatory and pulmonary complications and the occurrence of nausea and vomiting following these operations were tabulated and the results reduced to percentages.

That statistics may be of value, it is necessary that they be collected according to a definite plan, that they be honestly recorded, and that the attending circumstances under which the work has been done be indicated.

#### ATTENDING CIRCUMSTANCES

The cases of this series comprised a great variety of operations, of varying degrees of severity, performed by a number of surgeons. While nitrous oxid and oxygen was chosen for some of the most serious cases, it was used for so many of the minor operations that the circumstances can not be considered unfavorable to this anesthetic. As routine, a preliminary hypodermic of 1/6 grain morphin with 1/150 grain of atropin was administered to the adult patients a half hour before the time for operation. Nitrous oxid with oxygen was administered with several forms of apparatus. Ether was very rarely added to the mixture. Etherization was accomplished by an open method with measured dosage or, in 696 of the cases, by pharyngeal insufflation by a carefully measured technic. Ether anesthesia was almost always induced by nitrous oxid or nitrous oxid with oxygen.

The cases were checked up two weeks after operation for the occurrence of nausea and vomiting, for complications, and for mortality. Patients who had vomited once or twice during recovery from the anesthetic were considered as having a slight degree of nausea and vomiting. Those who vomited more than twice were considered to have vomited excessively. Those who

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are entered as free from nausea and vomiting did not vomit at all during the time of recovery from the anesthetic.

Although the search for post-operative complications ended after two weeks, significant complications and fatalities which occurred at a later time are included in the tabulation.

#### TABULATION

##### CIRCULATORY COMPLICATIONS

	<i>Gas-Oxygen</i>		<i>Ether</i>	
	Compli- cations	Mor- tality	Compli- cations	Mor- tality
Phlebitis	.60%	.0%	.65%	.0%
Coronary Embolism	.20	.20	.09	.09
Cerebral Embolism	.20	.20	.03	.03
Pulmonary Embolism	.33	.20	.20	.09
Mesenteric Embolism			.06	.06
Cerebral Hemorrhage	.20	.20	.03	.03
	1.53%	.80%	1.06%	.30%

##### PULMONARY COMPLICATIONS

	<i>Gas-Oxygen</i>		<i>Ether</i>	
	Compli- cations	Mor- tality	Compli- cations	Mor- tality
Pneumonia	.66%	.13%	.54%	.17%
Bronchitis	.135		.26	
Pleurisy	.135		.11	
Pulmonary Abscess	.135		.03	
Pulmonary Edema	.135	.135		
	1.20%	.265%	.94%	.17%

##### NAUSEA AND VOMITING

	<i>Gas-Oxygen</i>	<i>Ether</i>
Excessive	4.0%	5.3%
Slight	15.6	45.
None	80.4	49.7
	100.	100.

#### RESULTS

Circulatory complications occurred oftener after gas-oxygen than after ether anesthesia. Phlebitis, the most frequent of circulatory complications, followed gas-oxygen and ether in almost equal percentages. Coronary embolism occurred twice as frequently after gas-oxygen as after ether. Cerebral embolism and cerebral hemorrhage were about seven times more frequent after gas-oxygen. Pulmonary embolism was a half more frequent after gas-oxygen than after ether.

Pulmonary complications also occurred oftener after gas-oxygen than after ether. The oc-

currence of bronchitis following gas-oxygen was only a half the percentage following etherization but pneumonia, pleurisy, pulmonary abscess and pulmonary edema occurred more frequently after gas-oxygen.

The percentage of patients who vomited excessively was somewhat greater after ether than after gas-oxygen. The slight degree of nausea and vomiting was noted about three times as frequently after etherization as after gas-oxygen anesthesia. Not quite half of the etherized cases entirely escaped nausea and vomiting. Over 80% of the gas-oxygen patients did not vomit at all.

#### DISCUSSION

Circulatory and pulmonary post-operative complications come as a surprise to surgeon, anesthetist and to the patient's friends. Yet a proportion of all operative cases must be expected to develop such complications. Some of the complications would occur without the influence of the anesthetic or the operation. Embolism affects people in their ordinary course of life. It has occurred while a patient was awaiting an operation. Patients have died in the corridor while on the way to the operating room. The majority of surgical patients are not in the best physical condition but are debilitated by suffering, toxemia, cachexia or some degree of septicemia. Cerebral, pulmonary or coronary embolism, occurring as post-operative complications, may anticipate by only a few days or weeks the natural outcome of the patient's condition. A chill from exposure during preparation for the operation or during convalescence accounts for some pulmonary complications. Abnormal postures during and following operation must have an effect in the production of complications.

Anesthetics, powerful agents which produce profound physical changes and may cause death when given in overdose, affect the circulatory and respiratory systems and must be considered as factors in the causation of complications. Favorable effects of anesthetics are also noted, as in acute coryza, which often disappears after etherization, in bronchial asthma, the paroxysms of which are mitigated by etherization, and in some cases of pneumonia, in which a favorable crisis promptly follows the administration of gas-

oxygen. The effect of anesthetics in the causation of post-operative complications is difficult to determine. In the present tabulation, both pulmonary and circulatory complications occurred more frequently after gas-oxygen than after ether. If the tabulation had been extended to include nephritis and diabetis, it would have been found that uremia developed more frequently after gas-oxygen and that diabetic coma appeared seven times oftener following gas-oxygen than following etherization. These figures would have treated gas-oxygen unfairly for the reason that this anesthetic was routinely chosen for all cases of nephritis and diabetis in the series. Uremia and diabetic coma followed etherization only in the cases where nephritis and diabetis had not been diagnosed before the operation. The figures show that gas-oxygen anesthesia does not prevent the occurrence of circulatory and pulmonary complications or of uremia and diabetic coma in the patients who are predisposed to these conditions. The opinion, sometimes prevalent, that all post-operative difficulties are removed by the use of gas-oxygen or any other anesthetic has no foundation. It is probable that, if the same attention had been paid to improving the technic of etherization as has been spent on other anesthetics, ether would be universally recognized as the safest and most efficient of anesthetic agents.

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## MISCELLANEOUS

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### BACTERIOLOGY OF WHOOPING COUGH

During the winter and spring of 1925-1926, the Commission for the Study of Whooping Cough had ample opportunity to study the disease from many angles at the clinic established at the On-Shore Department of the Boston Floating Hospital. The purpose of this report by George M. Lawson and Mary Mueller, Boston (*Journal A. M. A.*, July 23, 1927), is to give the results there obtained so far as they concern the bacteriology of the disease. Nose and throat cultures taken in the usual way have not proved of value. There are two effective methods of obtaining cultures, each of which has its advantages and its disadvantages.

One of these methods consists in inoculating Bordet-Gengou plates with the sputum. The second successful method of obtaining cultures is to hold an open plate of the medium about 5 or 6 inches in front of the patient's mouth during a paroxysm of coughing, rotating the plate slowly to insure an even distribution of the expelled droplets on the surface of the medium. The direct plating of the washed sputum has the advantage that it is usually a more reliable index as to the presence or absence of *Bacillus pertussis* than is the cough plate method. The authors examined cultures from 1,115 suspected cases, contacts and patients with whooping cough. Of these, 259, or 23 per cent, showed the presence of *Bacillus pertussis*. From this series of cases complete records are available on 533 cases of proved whooping cough, 219 of which showed *Bacillus pertussis*. They have been able to isolate the organism as early as 24 days before the onset of the whoop (three cases). The latest positive culture was taken on the sixtieth day of the disease or at the thirty-sixth day of the whoop. *Bacillus pertussis* has been isolated from 19 patients who never whooped. Children previously shown to harbor *Bacillus pertussis* may give negative cultures early in the disease. Twelve cases yielding positive cultures up to the seventh day of the whoop became negative on an average on the fourteenth day of the whoop. Twenty-two cases positive up to the fourteenth day of the whoop became negative on an average on the twentieth day of the whoop. Five cases positive up to the twenty-first day of the whoop became negative on an average on the twenty-sixth day of the whoop. Mediums used must be freshly prepared and must be properly inoculated, either by seeding with carefully washed sputum or directly by means of the cough plate method. Single negative cultures are frequently misleading, and repeated cultures on three successive days are to be recommended, not only in establishing the diagnosis in the catarrhal stage of the disease, in second cases, and in patients who never whoop, but also in determining the length of the period of infectivity and the possibility of release from quarantine. It is suggested that the existing quarantine requirements be so changed as to include the catarrhal stage of the disease, and that the termination of this quarantine period be determined by release cultures as is the common practice today in diphtheria.

# THE RHODE ISLAND MEDICAL JOURNAL

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**R. I. Ophthalmological and Otological Society**—2d Thursday—October, December, February, April and Annual at call of President. Dr. J. J. Gilbert, President; Dr. M. J. O'Connor, Secretary-Treasurer.

**The R. I. Medico-Legal Society**—Last Thursday—January, April, June and October. Dr. Creighton W. Skelton, President; Dr. Jacob S. Kelley, Secretary-Treasurer.

## EDITORIALS

### EDWIN A. JOHNSON

It is our unfortunate privilege to chronicle the death of Mr. Edwin A. Johnson which occurred quite suddenly November 3d.

Mr. Johnson had since boyhood been associated with the printing business and some years ago established the printing house of which the E. A. Johnson Co. of the present day is the evolu-

tionary product. It is not however our purpose to trace his business career, suffice to say that since its inception the RHODE ISLAND MEDICAL JOURNAL has been printed by his firm and his helpful advice and suggestions have ever been of very material assistance to the publishers of this periodical. Not only has the JOURNAL lost a valued aid but we are deeply appreciative of the loss of a much esteemed personal friend.

The community has lost a substantial citizen.

Associations with which he was affiliated, commercial, social and fraternal, have spread upon



their records fitting resolutions and doubtless extended their condolences and sympathy to those left behind; but as an enduring monument to his many qualities and his real but unobtrusive friendship and fellowship, through the columns of this JOURNAL, in which he took such active interest, we express our token of sympathy and speak our sorrow in the realization of our loss.

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### IS IT SAFE?

It is interesting to note in current press that the Metropolitan Park Commission has recommended an appropriation of \$40,000.00 for the development of Edgewood Beach as a bathing site in spite of the fact that the State Sanitary Engineer has pronounced it unsanitary. This opens up an interesting field for speculation and inquiry. It offers an interesting, and parallels the absurd picture of a publicist recommending a presumed health measure directly contrary to the opinion of a trained sanitarian,—a lay delegate as it were against a professional. There are doubtless many cases in which experience may well be opposed to the ardor of specialism, in which talent may be superior to training and in which the lay mind can offer valuable suggestions to those whose studies have been conducted from different angles but not in recent years has there been so marked a contrast between the medical and the lay mind as this. Hardly in thirty years has the water of upper Narragansett Bay been more filthy than it has been during the past summer or the air more redolent. The condition of the Providence and Pawtucket Rivers is well known throughout New England and it becomes worse each year, yet the Metropolitan Park Commission and others, if articles in the newspapers are correct, would seemingly have the people of this state believe otherwise. If the upper bay is not fit for shellfish, it is not suitable for bathing and we venture to observe that if one gallon of this effluent were exhibited in a glass jar in a conspicuous down-town window it would furnish an example, a lesson, an exposition that would be conclusive in its self evidence. Furthermore we are of the opinion that many families use this beach because they are financially unable to go farther from town and not because they prefer the none too dilute sewage at this

point. We think that they are entitled to a safe and sane park and bathing beach and that this commonwealth should be able to provide it.

The problem of sewage disposal is disturbing many cities because through the enormous increase in population and industry their natural streams have become sewers. We read of new attenuations of energy which will epilate tissue in one tenth of a second and cause perforative ulceration in two seconds. Perhaps within another quarter century such radio activity may be used to sterilize the water supply when it leaves the city. One might go still farther in prophetic fancy and imagine a mighty quartz chamber through which sewage flows and upon which a battery of devitalizing tubes is trained.

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### THE TEACHING OF HYGIENE IN SCHOOL AND COLLEGE

It is a deplorable fact that many students who graduate from college with high honors are woefully ignorant in matters of personal and general hygiene. With the education of the public as one of the recognized objectives of the efforts of the medical profession it would seem proper to have included in all educational programs both of schools and colleges at least such instruction in the fundamentals that a reasonably intelligent attitude on matters of public and individual health may be attained by all students. Just as there is a minimum requirement of proficiency in English and mathematics, for example, which must be fulfilled before a student is graduated—so also his diploma should signify at least a minimum acquaintance with general and personal hygiene. If such were the case the number of citizens in positions of authority and responsibility who, for example, oppose vaccination against smallpox, or who “do not believe in operations,” or who rely on quacks, chiropractors or other charlatans would be greatly decreased. Thus fewer people would be wrongly influenced in their judgments on matters affecting their own health or that of the communities in which they live. The student who can wear a Phi Beta Kappa Key and when asked where the aorta arises can answer “In the Alps” would become an impossibility.

Many of the colleges have established Departments of Hygiene which are struggling for an

adequate place in the program of instruction in their institutions. Many more colleges will establish such departments in the near future. The college senior of the future will no longer have an acquaintance with health matters that should discredit an eight year old schoolboy—as is too often the case with his present day representative. The JOURNAL believes that instruction in the public schools in matters of health should be greatly extended and that in the colleges the subject should be placed on the list of those required for a degree and developed to an extent commensurate with its importance in the training of a citizen to meet the vicissitudes of life.

---

### OF WHICH AM I ?

Life is a succession of choices, most of them compromises.

The young physician soon learns that he must strike a nice balance between what we may term "quantity production" and fine craftsmanship. The difference is most clearly appreciated by regarding the methods of men who have chosen one or the other extreme.

The "quantity" man sees as many patients a day as possible, giving but a few minutes to each and of necessity missing many points which a more extended consideration would develop, but undoubtedly giving relief in a majority of cases.

At the other end of the scale is the man who sees very few cases but puts much time into the study of each one and brings to bear all the laboratory facilities at his command. He spends much time in study.

Either method carried to extremes defeats the purpose of the physician to be of the greatest possible good to humanity. It is an awkward dilemma.

The man who wears himself out trying to keep pace with the multiplicity of new information leaves himself neither time nor energy to apply that knowledge to the relief of suffering. Neither is the average patient willing to spend either the time or money necessary for such intensive study.

The over busy practitioner on the other hand quickly falls behind in his methods and has progressively less and less of value to give to the many patients he sees.

Somewhere between these two extremes must the great majority of physicians take their station.

That man who most closely estimates his aptitudes and finds his proper place will do most for the good of all.

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### LETTER OF INVITATION

FROM THE  
RHODE ISLAND STATE DENTAL SOCIETY  
TO ALL MEMBERS OF THE  
RHODE ISLAND MEDICAL SOCIETY

November 19, 1927

Dr. Norman M. MacLeod  
President R. I. Medical Society  
114 Touro Street  
Newport, R. I.

Dear Doctor MacLeod:

The Rhode Island State Dental Society will celebrate the half-century of its establishment, which marks the annual meeting, to be held in the Providence Biltmore Hotel, January 11, 12, 13, 1928.

According to some qualified historians, chronicling the birth of American Dentistry, Rhode Island stands in an unique position, in fact, the first practice of dentistry in America was taught on Rhode Island soil. Therefore, the semi-centennial meeting of our society will have a special significance to the State of Rhode Island.

Kindly convey to the members of the Rhode Island Medical Society cordial invitation to attend any of the clinics on January 11, 12, 13, 1928.

Very truly yours,

AMBROSE H. LYNCH

*President*

(The House of Delegates accepted on behalf of the Society the foregoing appreciated invitation.  
Ed.)

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### SOCIETIES

#### PROVIDENCE MEDICAL ASSOCIATION

The regular monthly meeting of the Providence Medical Association was held at the Medical Library, 106 Francis Street, Monday evening, November 7, 1927, at 8:45 o'clock, with the follow-

ing program: 1, "The Origin of the Word 'Anæsthesia,'" by Dr. Albert H. Miller. 2, "Surgical and Non-Surgical Treatment of Tuberculosis of the Urinary Tract with a Brief Discussion of the Pathology," by Dr. Oswald Swinney Lowsley of New York City.

The Standing Committee approved the applications of the following for membership, Dr. Jacob Greenstein and Dr. James Henry Fagan both were elected.

Collation followed.

PETER PINEO CHASE, M.D.  
*Secretary*

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#### PAWTUCKET MEDICAL ASSOCIATION

The regular monthly meeting of the Pawtucket Medical Association was held at the Pawtucket Golf Club House on Thursday evening, September 20, 1927. The speaker of the evening was Arthur F. Jones, M.D., of Providence. Subject, "Gall-Bladder Surgery." Following a discussion of this interesting paper a collation was served.

LESTER J. GILROY  
*Secretary*

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#### WOONSOCKET DISTRICT MEDICAL SOCIETY

There was held a meeting of the Woonsocket District Medical Society, Thursday, October 20, at 8:30 P. M. at the Woonsocket Hospital.

Good speakers were present and much business of importance was transacted.

W. A. KING, M.D.  
*Secretary*

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#### RHODE ISLAND MEDICO-LEGAL SOCIETY

The regular quarterly meeting of the Society was held in the Medical Library Building, 106 Francis Street, Providence, on Thursday, October 27, 1927, at 5 P. M. Program: "Under the Influence," with illustrations by lantern slides, by Henry A. Jones, M.D., of Auburn, R. I. Following adjournment supper was served.

JACOB S. KELLEY, M.D.  
*Secretary*

## BOOK REVIEWS

### AN OUTLINE HISTORY OF OPHTHALMOLOGY

By Thomas Hall Shastid, M.D., F.A.C.S.  
American Optical Co., Publishers

A brief but quite complete history of ophthalmology from the earliest mention of the subject in "The Code of Hammurabi," 2250 B. C., down through the ensuing centuries to the present.

The author states on the title page, that this is "an attempt to state the History of Ophthalmology in forty-five minutes." That he has not attempted the impossible is shown by the quite complete review of the most important items pertaining to the history of ophthalmology. A short space is devoted to the history of spectacles and eye-glasses, and a review of the invention of the ophthalmoscope, by Von Helmholtz, in 1850.

A synopsis of the history of the test types, the trial case, strabismus operations, cataract operations and a review of some of the later drugs used in ophthalmology, with mention of the X-ray and the tonometer, completes the short, but very interesting little book.

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### CAVERNOUS SINUS THROMBOPHLEBITIS

By WELLS P. EAGLESTON  
Published by MacMillan—1926

The author has in this brief monograph presented a very comprehensive study of the pathogenesis of this severe and usually fatal form of intracranial inflammatory process.

The study is based on 25 personally observed cases with 21 deaths (12 autopsies) and 4 recoveries. He has given considerable space to a discussion of the different sources of infection, the avenues by which the infection enters the cranial cavity; of the embryology and the surgical anatomy of the large cranial sinuses in relation to the pathogenesis.

He also gives a chapter to description of sinus pathology.

In his chapter on operative treatment he has drawn attention to the value of putting the inflamed sinuses to rest by ligation.



A chapter is also devoted to serotherapy and vaccinothrapy including some work on transfusion and immunization of donors.

There is an excellent Bibliography.

To one who comes in contact with cases of cranial infection this book should prove of exceptional interest.

## DISEASES OF THE EYE

By CHARLES H. MAY, M.D.

Twelfth Edition

William Wood & Company, Publishers  
(445 pages, with 374 illustrations.)

This edition represents minor revisions of the previous ones. Methods still under controversy or upon trial are omitted. Dr. May presents the fundamentals of ophthalmology in a clear, concise manner, which well justifies the book's continuance as the most popular manual for both students and general practitioners. The numerous illustrations and colored plates add greatly to the value and clarity of the text.

The book provides, for its purpose, a surprisingly comprehensive consideration of the eye, in a small, compact volume.

## STUDIES IN INTRACRANIAL PHYSIOLOGY AND SURGERY

The Third Circulation, The Hyphysis,  
The Gliomas

By Harvey Cushing, M.D.

Oxford University Press, Oxford, 1926

Almost fifty years ago the University of Edinburgh received from one of its graduates, Andrew Robertson Cameron, a bequest "the proceeds of which were to be awarded to a 'practitioner or member of the Medical Profession' who should be adjudged to have made some addition to practical Therapeutics during the year preceding." It is probable that the testator, in making this provision, had no conception of the tremendous advances which that most practical form of therapeutics, operative surgery, was soon to make; for the first lecturer under this bequest, Louis Pasteur, laid the foundation for our knowledge of infection, and the second, Joseph Lister, applied this knowledge to the development of antiseptic and aseptic surgery. The volume under consideration contains the Cameron Lectures for

1925, and records advances no less epoch making in the author's particular field, that of intracranial surgery. With a modesty which is all the more refreshing because of its comparative rarity in books of this sort he states—"On my own part, I feel that the Testator's intent in establishing this Prize has now been stretched as never before, for though some therapeutic contributions have come from my co-workers and pupils, I do not know that I am personally to be credited with anything more than the introduction of a few trifling technical procedures which in time are almost certain to be superseded." Thus lightly does he refer to work on the development of diagnostic and operative methods which have made possible the increasingly brilliant results of intracranial intervention.

Osler, in one of his later addresses, divided men into creators, transmuters, and transmitters, and Cushing, in his "Life of Sir William Osler," added another class—"the inspirers or animators—a group to fill almost as few benches as the creators." Dr. Cushing's right to a place in the first group, that of the creators, has long been acknowledged and is emphasized by this present work: the additional distinction of belonging to the equally exclusive class of inspirers must now be accorded him, for this work reveals him as the animator of a score or more of younger men, many of whom have made important contributions to this particular field of surgery.

The first lecture gives, in a very interesting fashion, the history of the development of our knowledge of the cerebrospinal fluid and its pathways, with a careful description of the present state of that knowledge and its therapeutic significance. The second deals with the pituitary gland as now known, the author reaching the conclusion that the surgery of this organ is still in the "stone age" of its development. The third discusses the relation of the surgeon to intracranial tumors, considering the gliomas in particular. It is fair to state that the general conception of a glioma is that of a rapidly infiltrating tumor which can be removed only with great difficulty and then probably not in its entirety. It is accordingly encouraging to learn that at least forty percent of these tumors, the group designated as astrocytomas, are exceedingly favorable for operative treatment. This study of the gliomas has been elaborated upon in later publications, <sup>(1)</sup> <sup>(2)</sup> with equally hopeful conclusions.

This book, then, represents the work of a man equally at home in surgery or literature, and is accordingly well worth reading from either standpoint.

<sup>1</sup>Bailey, P. and Cushing, H.—A classification of the tumors of the glioma group on a histogenic basis—J. B. Lippincott Co., Phila., 1926.

<sup>2</sup>Bailey, P.—Further remarks concerning tumors of the glioma group—Bull. Johns Hopkins Hosp., 1927, xl, 354.



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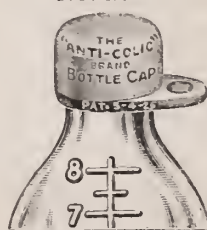


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